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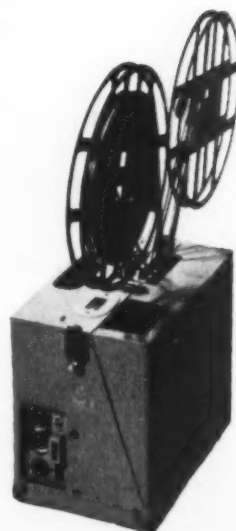
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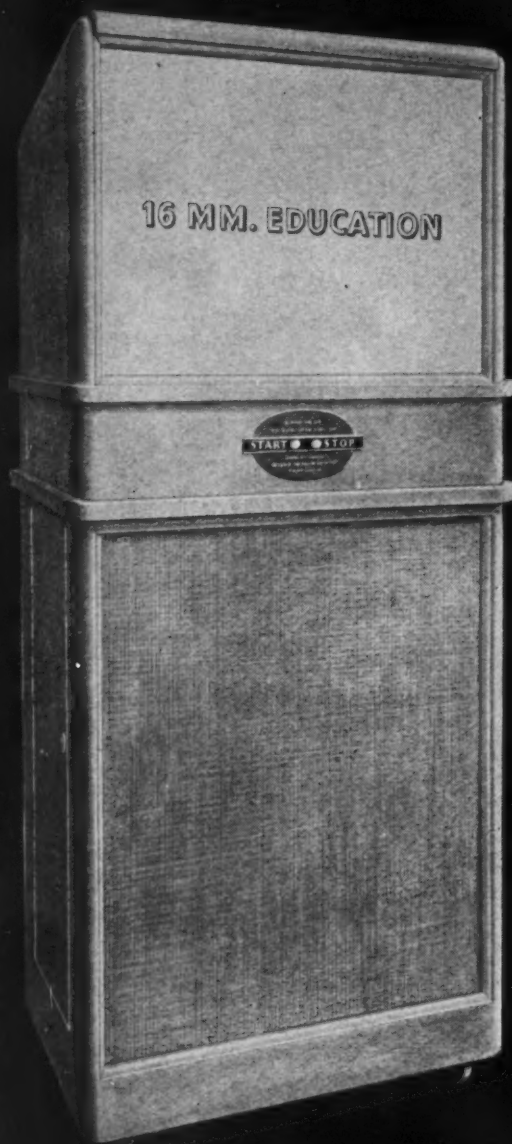
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HEADLINES

MILITARY TRAINING

The pro and con discussion of military training goes on vigorously, with President Roosevelt announcing that he would press for legislation requiring every American youth to give one year of service to his government but not committing himself as to whether he meant military training only during this year.

The American Federation of Teachers opposes hasty action on military training as do the national commission on Christian higher education of the Association of American Colleges, the Federal Council of Churches of Christ in America and the Catholic bishops of the United States. (Stories on page 64.)

Pro and con articles on compulsory military training and an expression of opinion by Michigan schoolmen appear on pages 28, 29 and 46.

The United States Chamber of Commerce favors a policy of military training. (Story on page 64.)

CHICAGO INVESTIGATION

The N.E.A. has started its investigation of the Chicago schools and the Chicago Teachers Union has gone on record as favoring the action, placing its resources at the disposal of the investigators. (Story on page 66.)

NEW SCHOOL COMMISSION

The American Federation of Teachers has organized a new Commission on Educational Reconstruction for taking action on crucial educational problems. (Story on page 64.)

EDUCATION AND PROSPERITY

A study by the U. S. Chamber of Commerce has revealed a direct relationship between the economic status of the country and its high educa-

tional level. Interesting conclusions are drawn regarding education as an essential instrument for expanding commerce, industry and agriculture. (Story on page 64.)

V-12 TRAINING PROGRAM

No trainees from civil life or from the service will enter the Navy V-12 college program for the term starting March 1, 1945. (Story on page 68.)

EMERGENCY PERMITS

Indications are that 75 per cent more emergency teaching permits will be issued to underqualified teachers this year than last year. The teacher shortage still persists. (Story on page 68.)

MINIMUM AGE FOR WORKERS

The Children's Bureau is advocating a statutory 16 year minimum age standard for children working during school hours and in manufacturing establishments at any time. (Story on page 70.)

FEW APPLY FOR TRAINING

Of 184,000 disabled veterans eligible for vocational rehabilitation, only 34,000 have applied. Excellent employment opportunities now available may be the reason. (Story on page 70.)

\$500 CAPITAL ADDITIONS

Schools will be able to get minor capital additions costing up to \$500, instead of \$100 as previously, under an amendment to Controlled Materials Plan Regulation 5A. (Story on page 74.)

INTERNATIONAL EDUCATION

The Liaison Committee for International Education met in Washington recently. Prospects for obtaining a United Nations Office for Educational and Cultural Reconstruction were discussed. The N.E.A. favors passage of House Resolution 5350

as a measure for extending the good neighbor policy to all nations of the world. (Story on page 72.)

G.I. EDUCATIONAL LEVEL

More soldiers in this war completed four years of high school than soldiers in World War I. The two largest groups in both wars completed no more than five to eight years of grade school, but the percentage is lower in this war. (Story on page 72.)

MORE MEAT FOR SCHOOLS

School cafeterias supplying specified meats, such as fabricated beef and veal cuts, ground beef and miscellaneous beef items, will be permitted to apply for increased sales quotas, according to an O.P.A. announcement. With more mothers going into war work, more children are eating lunches in school cafeterias.

FOREIGN LANGUAGES

The Army's success in teaching foreign languages is causing colleges and universities to revamp their teaching technics. Army instruction involves (1) classes of not more than 10; (2) intensive work, as much as 20 hours a week; (3) emphasis on conversation, little on grammar; (4) use of native teachers and recording machines. Some schools are already experimenting. Others, like the University of Illinois, are making plans. (Story on page 66.)

TOO YOUNG FOR UNIVERSITY

Franklyn B. Snyder, Northwestern University president, criticizes the policy of admitting high school sophomores to university classes, stating it is unfair to transplant these youths to campuses where the intellectual, social and physical standards are established by much older students.

For full news coverage of the month, see news section beginning on page 64.

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Webster Engineers have found through thousands of surveys that seven out of ten large buildings in America (many of them less than ten years old) can get more heat per unit of fuel consumed.

If you are wondering now how to obtain controlled heat throughout your building next Winter, write for "Performance Facts". This free booklet contains case studies of 268 modern steam heating installations.



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Manufacturing costs have greatly increased. Refinements in the design of HILD Equipment add still more to the cost of post-war models. Prices may go higher. However, orders placed *now* will be accepted at prices in effect before the war.

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Educating the Consumer

A clear-cut consumers' relation program has been worked out for the schools of New York City. Each school has a consumer counselor, a teacher with special duties in this field. She receives all important consumer materials and distributes them to the staff, organizes school consumer projects and stimulates the development of consumer education. These materials are used in elementary schools, junior and senior high schools and vocational schools.

Typical mimeographed bulletins which are sent to each counselor for her guidance include the following: (1) an outline of the program needs for 1944-45, listing the special problems of releases, speakers and movies, bibliographies and reference materials, parents' meetings, consumer counselors' meetings, courses and radio broadcasts with suggested solutions for each problem; (2) an orientation bulletin defining terms, outlining the areas in which consumer education functions and indicating contributions which can be made by teachers; (3) a program for war-time consumer education in the major areas of food, clothing, home and housing, health, leisure time, with a discussion of money management and social-consumer problems to follow in later bulletins; (4) a bibliography, and (5) a bulletin on this and that relating to consumer goods.

Art for the Masses

An experiment in mass teaching of art appreciation is being carried on at Englewood High School, Chicago, under the inspiration of Joseph C. Thompson, the principal.

There dramatically hung in the school library is a valuable work of art borrowed from the world famous collection of the Art Institute of Chicago. The art object is changed each month.

The experiment is entirely divorced from the school's art department but its hanging is a cooperative venture among other departments. The home economics department makes the hangings that are a part of the installation. The electrical shop installs the special lighting that is needed.

The month of October marked the beginning of the experiment. The first loan exhibit was Peter Hurd's vigorous painting, "El Mocho," a study of a New Mexican cowboy that Mr. Thompson sensed would appeal to the boys since "El Mocho" is really a "tough guy."

The pupils were exposed to the paint-

ing class by class. They were told nothing about the painting or the artist except that here they had before them an original work of art put into their safe keeping for that month. After sizing up the picture they either wrote their impressions of it or gave them orally.

Afterward the pupils read about the artist and the painting. The school librarian soon began to have a run on art books, something that had never happened before. The experiment was off to a good start.

A bust of Hawthorne occupied the art niche in November. This gave the English classes and the history classes the same good leads that the painting of the Southwest had furnished them the month before.

For December Englewood will get another painting, a skating scene by a Dutch seventeenth century master.

Mr. Thompson reports that the fact that the school has in its possession a valuable original object of art has made a deep impression upon the pupils, the majority of whom are Negroes.

Preparing for V-E Day

Although it may be delayed now until next spring, V-E Day is surely coming and schools are wondering how to meet it constructively.

The New York State Education Department has recently issued a bulletin to principals and superintendents on the subject, suggesting possible types of school participation. The bulletin stresses the importance of making plans and for having these plans understood in advance by pupils, teachers, parents and the general public.

The keynote of all observances, according to the bulletin, should be thankfulness for the victory and a realization of the job still ahead. Thought must be given to those who have undergone great suffering, to the bereavement of parents and relatives of men and women who

have died, to the many still in prison camps in the Pacific theater and to the destitution and starvation being suffered by millions of our Allies.

In communities in which there is danger of a lack of sobriety in community observances, the bulletin suggests that "the local administration discuss now with school boards the pros and cons of keeping open places of public assemblage in some or all of the local school buildings (for example, gymnasiums and auditoriums). Where this is done, the question of proper supervision and suitable activities designed to permit young people to let off steam in approvable ways could be dealt with in advance.

"A few communities, where the danger of young people's frequenting undesirable resorts is thought to be considerable, may wish to discuss the possibility of a Victory Ball or something of the sort for the night of V-E Day. In the matter of delinquency, prevention is always better than cure."

To Serve Returned Veterans

Niles Township Community High School at Skokie, Ill., is taking definite action to give veterans of the township what they want in the way of education when they return. Through Supt. A. L. Biehn a letter and questionnaire are being sent to all residents of the township now in the armed forces stating that the high school hopes to serve them on their return in a way that will best meet their needs, provided the services offered by colleges and governmental agencies do not fill the bill. The letter says:

"For those of you who wish to complete requirements for graduation, to review certain subjects or to study new ones, the regular high school classes may meet your needs. However, if they do not, classes in the late afternoon will be organized on sufficient demand. For those who wish to work and attend school, the part-time work program already in operation may be the most satisfactory arrangement.

"The high school's offer to you also includes evening recreational classes in dramatics, orchestra, band, chorus, art, shops, swimming and basketball. These classes may make your leisure time more enjoyable. (For any class there will be only a small fee to pay for supplies.)"

The men are asked to return the questionnaire, describing their future plans for education and indicating the type of work they are most interested in and consider the most practical.

The Roving Reporter



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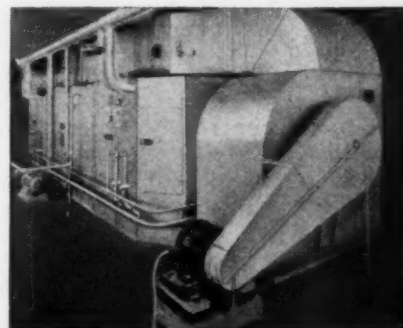
Wars are not won by heating and ventilating—not by any stretch of the imagination. But, proper heating and ventilating is one of many, many factors that have contributed materially to America's magnificent war efforts.

Proper heating and ventilating are an important safeguard to health—in schools as well as in business and industry. They are a sure means of minimizing many minor respiratory diseases, and an important aid in building strong bodies.

Fortunately for America during the war period when practically no new school construction was permitted, and overcrowding of our schools was a necessity, the majority of our school buildings were already equipped with proper heating and ventilating.

This is a tribute to the farsightedness of American school authorities and the co-operation of many concerns, like American Blower, who have devoted a lifetime to the improvement and application of proper heating and ventilating, not only to schools and public buildings but to industries of every type and description.

After Victory, American Blower will be ready with greatly improved heating and ventilating equipment for all needs.



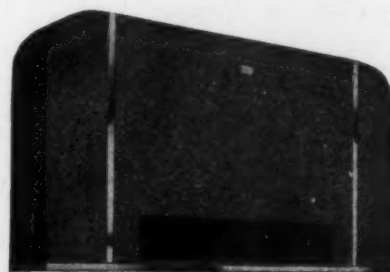
American Blower Equipment for heating and ventilating has been extensively used in schools of many types and sizes all over America. For every type of air handling equipment, you can depend on American Blower.



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Questions —AND ANSWERS

Painting Concrete

Question: How do you keep concrete floors of hallways looking right without painting? The paint soon wears through leaving lanes of unpainted surface.—R.H.M., Ohio.

ANSWER: Paint is hardly a satisfactory material for concrete-floored hallways in a school building. Traffic through the hallways is too heavy to expect a paint coat to last very long. We do not know of any way that you could keep the floors looking satisfactory except by prompt repainting, perhaps using a quick-drying paint, whenever necessary. There are paints on the market which could be applied to the floor in a late afternoon or evening and be ready for service on the following morning. Or, of course, the painting could be done at the week end, thus giving it an opportunity to harden over at least a part of Saturday and all day Sunday.—W. W. WALLACE.

Gravel Playgrounds

Question: How can we improve bare gravelly playgrounds?—R.G.P., Wis.

ANSWER: Assuming that the playground is properly graded and well drained, the only remaining item to be considered is the type of surface. A soil surface with a large percentage of gravel can be improved in three ways. First, the gravel can be removed by excavating to a depth of 6 inches, screening out the gravel and replacing the soil to its original grade; second, an entire new surface of good textured soil at least 4 inches deep can be applied over it; third, the surface can be stabilized by the addition of emulsified asphalt. In the third method the soil must be excavated as is done in the first method and mixed in a concrete mixer with the emulsion. In this method the additional cost of screening out the gravel may be saved although removal would make the better surface.—DAVID WEGLEIN.

Compulsory Showers

Can pupils be forced to take showers after physical education classes or at any other time?—H.H.M., Minn.

ANSWER: Force is not the word to use. The reason for refusal to take a shower is more important. Attention should be given throughout the school

to ways and means of motivating cleanliness through the physical education and hygiene program. Never have the schools had a greater opportunity to use the fitness and other government sponsored programs to motivate instruction.

If, with certain children, the program cannot be popularized, an individual conference should be held. Such topics as body hygiene, the offensiveness of body odors and the possibility of being ostracized by fellow pupils can be seriously discussed. Sometimes health charts are of assistance.

Often unsuspected shyness is the basis for a child's attitude. In such cases it is wise to have at least one or more showers where privacy is possible. Sometimes an excuse for a special appointment when others are not around offers an opportunity to give him the run of the showers. A program of popularizing cleanliness through instruction and incentives peculiar to the situation in the school will give the best results.—CHESTER F. MILLER.

Physical "Ed" Equipment

Question: What can be done about pupils who do not equip themselves for compulsory physical education classes?—H.H.M., Minn.

ANSWER: Your question does not specify whether their failure to equip themselves is due to financial inability to purchase the equipment or is deliberate. At the close of the year, most schools clean out lockers and have the unclaimed materials sterilized and mended. The physical education instructor then has this material available to hand out to those not equipped. This is done discreetly in needy cases.

Some schools operate an exchange with success. To be sure, all material must be sterilized. Pupils who do not have shoes can wear cheap, heavy socks. Often the requirement that pupils go on the floor in stocking feet or an offer to furnish articles of clothing will touch the pride of pupils and result in their obtaining proper equipment. Assignments opposite gymnasium classes known to be disagreeable to the pupils usually bring them into line.

Motivated by the war, there never was a greater opportunity to impress pupils with the importance of physical

fitness and the need for proper equipment in avoiding injury and preserving health.—CHESTER F. MILLER.

Let's Have Better Teaching

Question: How can we speed up, adopt and practice teaching which will help the child to grow so that his life will be full and his personality will develop unhampered by blind adherence to tradition? Public schools are a million miles from the best known theories of actual education.—H.C.F., N. J.

ANSWER: There is one basic answer to this question. It is to raise the ceiling of public support so that only the ablest and strongest men and women with outstanding intelligence and personality are attracted to teaching. Everything else is secondary and irrelevant until this objective is gained.

Those in the profession already know far more than they are able to practice. When we have men and women in the profession whose salaries begin to measure up to the financial standards in other fields, we can hope to achieve full opportunities for children. The gap between theory and practice will close when we have gifted teachers who are paid a decent competence in our schools.—PAUL A. REHMUS.

Avoiding Partiality

Question: How can a teacher who is related to several pupils in school treat them fairly without others thinking that he is showing partiality?—V.G.D., Ark.

ANSWER: Children, as a rule, are most fair in their evaluation of teacher relationships with the children in the class. I suggest that the teacher carry on her work with equal consideration for all the pupils in her class. Teachers overly concerned about this problem should request a different assignment.—FRANK A. JENSEN.

Guidance in Small School

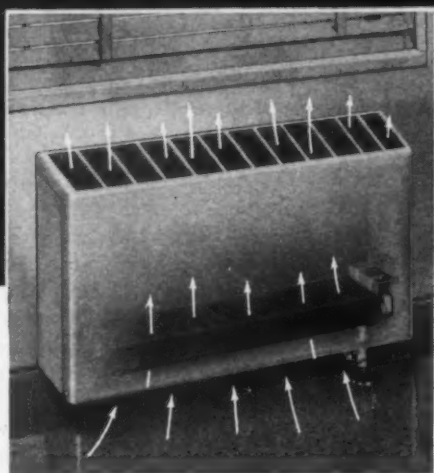
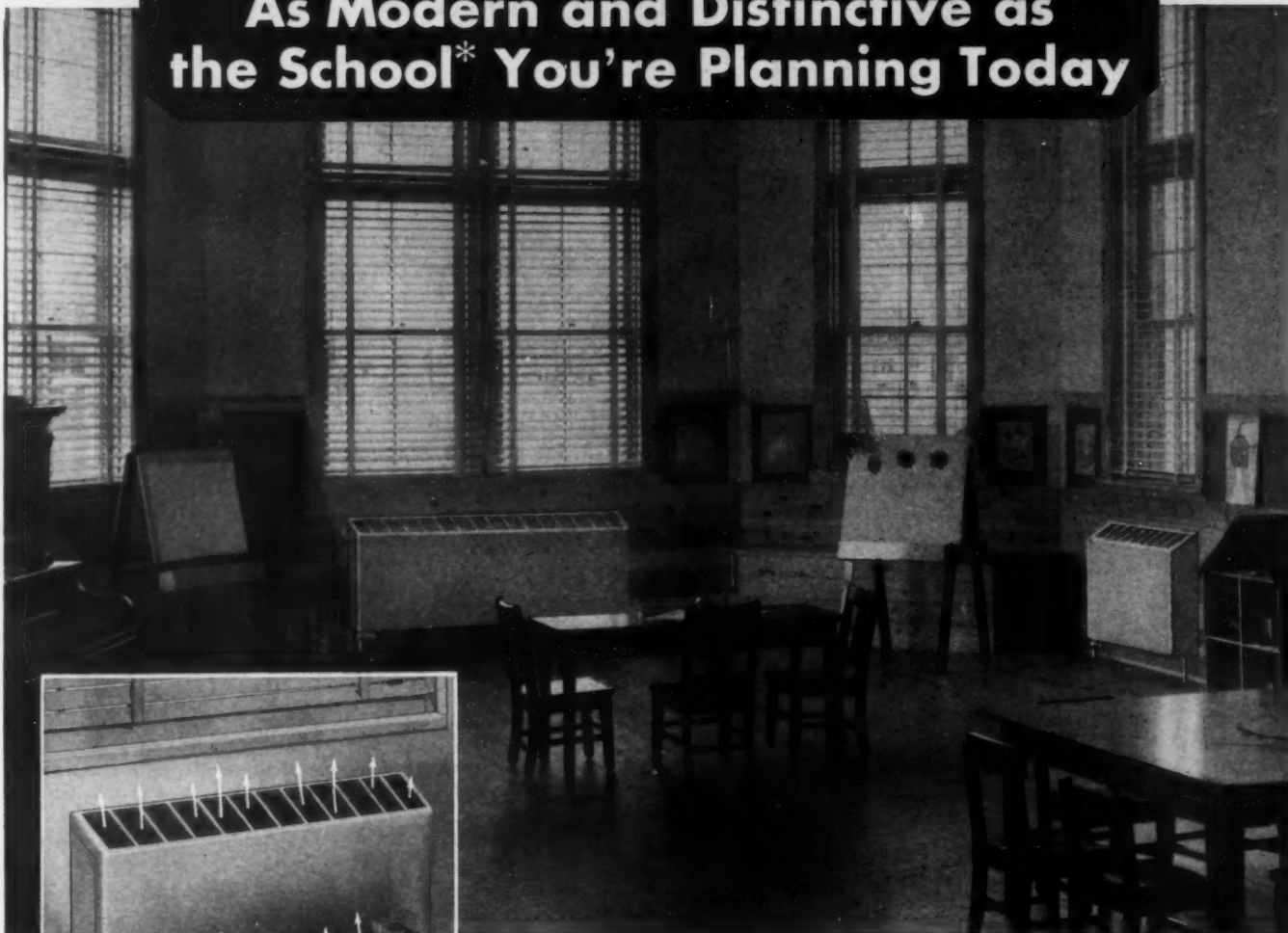
Question: What should be a minimum guidance program for a high school of about 100 pupils with four teachers?—J.J.V., Mich.

ANSWER: The four teachers should be trained to note and record descriptive and significant items of behavior for each pupil. At given intervals these observations should be collected and recorded in a journal kept for each pupil. When a sufficient number of anecdotes have been collected on a group of individuals, this information, together with all other records and reports, should form the basis of a combined guidance clinic for educational and vocational counseling.

Such a system would assure a concept of personal development, provide data for evaluating the success of the school program and supply an increased understanding of each pupil.
(Continued on page 10)

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No Intense Radiated Heat...Pupils Sitting Near Modines Are Not Uncomfortable or Drowsy

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THE NATION'S SCHOOLS

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By the time a boy or girl becomes a senior, an important compilation of facts and opinions with respect to his capacity, attitudes and knowledge will have been collected. This can then be used as a basis for guidance and counseling with respect to suitable and available jobs or professions.—A. L. WINSOR.

Failure of Reelection

Question: When and how should teachers and other employees be notified that they are not to be reelected for the ensuing year?—W.R.R., Tex.

ANSWER: State laws relating to employment and tenure should be observed. In cases not requiring immediate dismissal the employee should be informed of unsatisfactory service through full and frank discussion. An opportunity should be granted for further trial under agreed conditions, preferably for another year.

For employees other than teachers a similar method can be used and the period of trial may be reduced.

Sound reasons for failure of reelection, when considered in a fair and equitable manner, seldom cause any real problem.—H. MORTON JEFFORDS.

Painting With Spray Gun

Question: Does painting with a spray gun prove as satisfactory as a brush job?—J.J.V., Mich.

ANSWER: A superior job of interior painting can be obtained by a spray gun in the hands of a skilled mechanic. Reasons: more even spread and better coverage over flat work and especially over ornamental work with interstices.

Brush work, generally, is more satisfactory for exterior painting. A thicker bodied paint can be used and there is less danger of damage from wind blowing paint mist on surrounding property such as occurs with spray gun painting.—DAVID WEGLEIN.

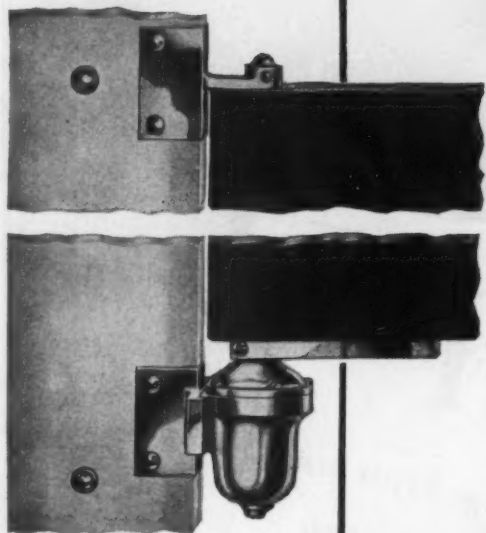
Stair Edges Chip Off

Question: Our building is equipped with stair treads of concrete, reinforced with steel wool. There is no metal lip on the outer edge of the step. Some steps have chipped off. What is the best method for repairing the steps?—F.F.S., Wis.

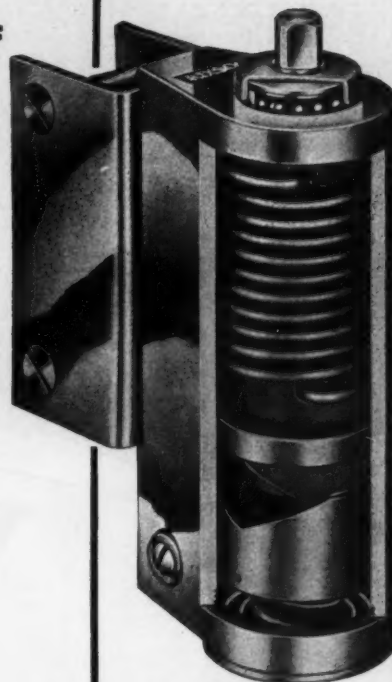
ANSWER: We doubt whether any method of patching these steps would produce a bond with the existing concrete of sufficient strength to be satisfactory. The outer edges of the treads, obviously, receive all of the shocks of traffic and the fact that they have already become chipped indicates that the concrete is not of sufficiently high strength and quality to withstand the stresses. We suggest complete replacement of these stair treads.—W. W. WALLACE.

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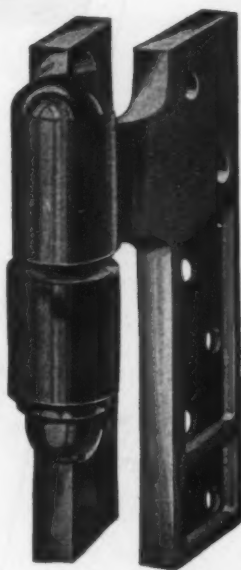
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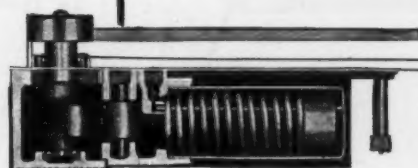
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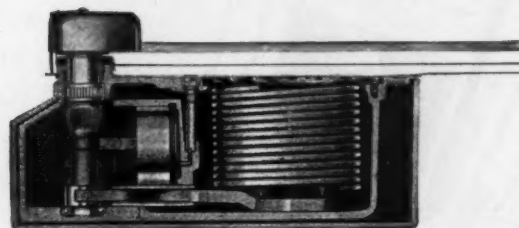


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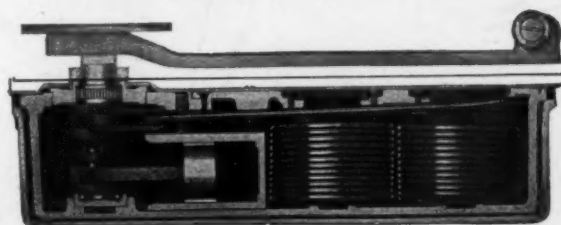
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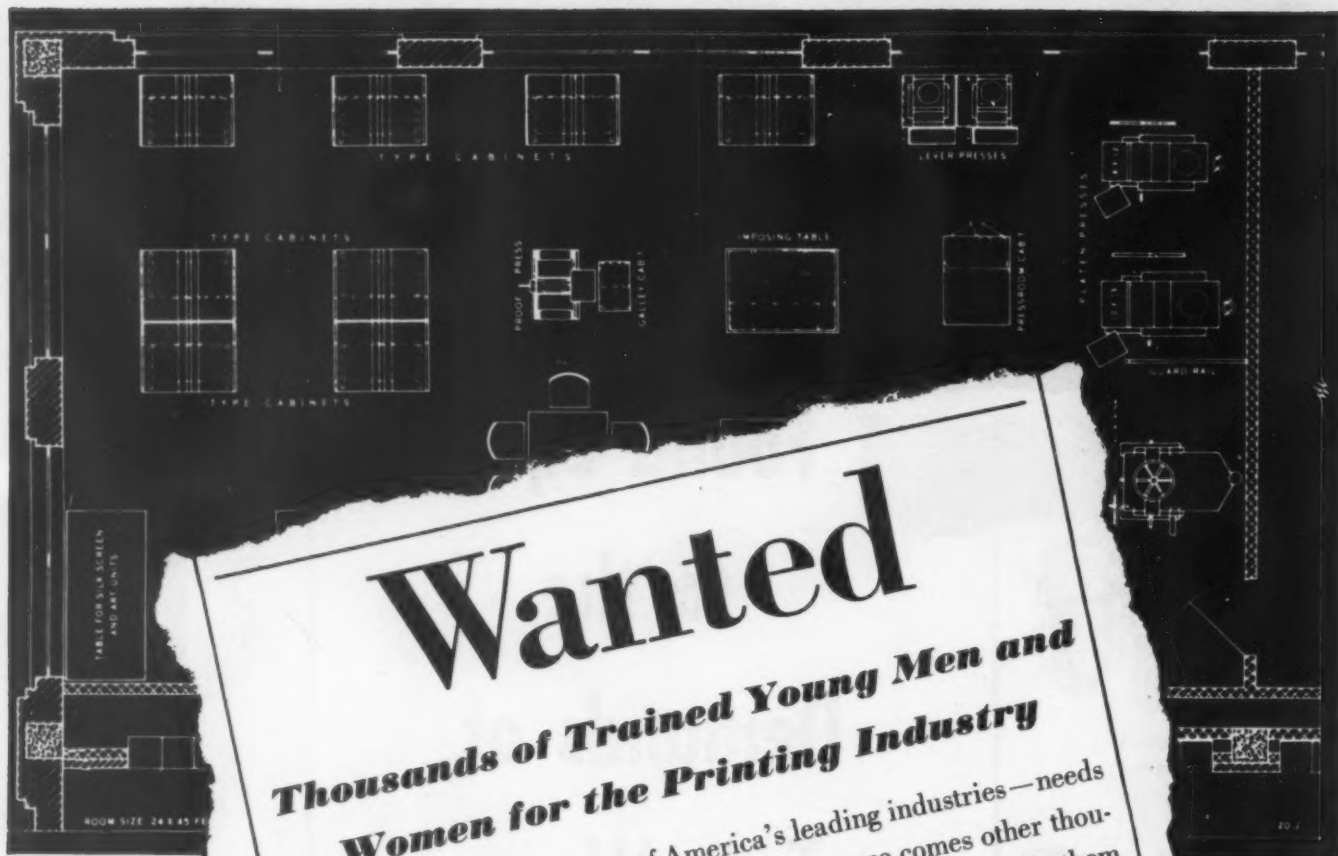
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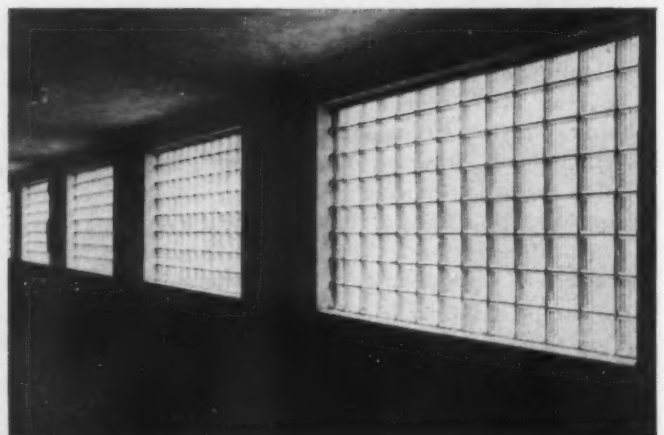
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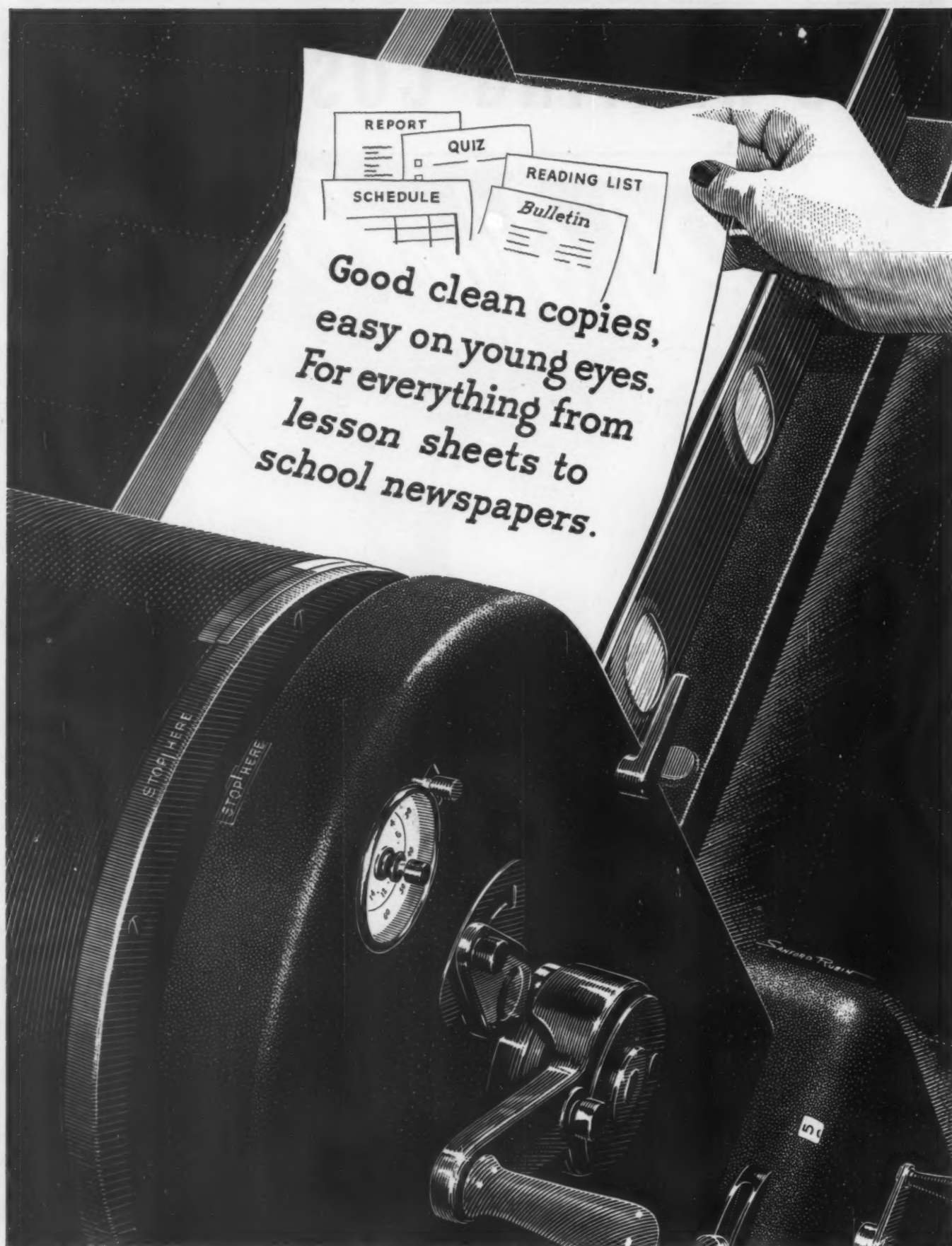
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The NATION'S SCHOOLS

LOOKING FORWARD

Education for Youth

THE Educational Policies Commission's most recent report entitled "Education for All American Youth" looks critically but hopefully at the problems confronting American public education in the postwar years. The fundamental issue is clearly and forcefully considered as two alternative possibilities:

"1. A federalized system of secondary education may be created, at first to compete with and ultimately to replace the traditional American system of state and local control of education," or

"2. A wisely planned and vigorously implemented program for the improvement, adaptation and extension of educational services to youth may be developed by the local and state educational authorities."

The commission strongly favors the second alternative and has developed this 421 page book expanding and illustrating the changes that it conceives must be accomplished during the postwar years to meet the needs for a more democratic education and to prevent undesirable centralization and control.

This is one of the most valuable and timely documents produced by the Educational Policies Commission and every member of the teaching profession should be encouraged to read it. Its text might profitably be made the subject for professional gatherings of all types during the ensuing year. The price is sufficiently reasonable to make it easily available to all.

Cost of Living Changes

AFTER reviewing all of the evidence submitted for and against the Bureau of Labor Statistics' cost-of-living index by the special committee of the American Statistical Association (October 1943), the report of the Meany-Thomas Committee (November 1943), the report of the Mitchell advisory committee to the President's Committee (June 1944) and the Murray-Thomas report (June 1944), there seems to be no valid reason for questioning the accuracy of the Bureau of Labor Statistics' cost-of-living index. The Murray-Thomas report contends that the cost of living has increased 45.3 per cent between January 1941 and March 1944 while the Bureau of Labor Statistics reports an increase of only 22.8 per cent. (See *THE NATION'S SCHOOLS*, September, page 46.)

The scope and limitations of the Bureau of Labor Statistics' cost-of-living index are well described by

Prof. Frederick C. Mills of Columbia University (October 10, 1943) as "a satisfactory instrument for measuring what it attempts to measure, average movements in the retail prices of goods and services purchased by city workers. . . . The index is designed to measure only those changes in family expenditures resulting from changes in unit prices. It is not designed to measure alterations in family expenditures resulting from changes in manner of living, whether the changes are due to choice or necessity. Such alterations can only be measured by other statistical devices, such as direct inquiry into family incomes and expenditures. . . ."

The C.I.O. index has been recommended by the National Commission for the Defense of Democracy Through Education (National Education Association) for use in determining essential changes in the salaries and wages of public school employees.

The President's Committee has not yet made its report and until such time as this controversy between organized labor and the Bureau of Labor Statistics is harmonized or compromised by the committee's final official report, *THE NATION'S SCHOOLS* will continue to use the Bureau of Labor Statistics' cost-of-living index.

Teacher Training Centennial

ON DECEMBER 18, 1944, the New York State Normal School at Albany will have been in active existence for one hundred years. The seventy-ninth convocation of the University of the State of New York gave proper recognition to this event.

The need for trained teachers for the growing public schools was recognized in the 1830's and Massachusetts took the lead by establishing the first normal school at Lexington in 1839. This institution is still operating at Framingham. The Albany school, created by statute on May 7, 1844, "for instruction and practice of teachers of common schools in the science of education and the art of teaching," was among the first of the state-supported teacher training schools.

The regents of the University of the State of New York and the state superintendent of common schools took joint charge of this new experiment which many considered an undesirable extension of Prussian formal educational influence into a democratic land. While the professional educators who had studied abroad were enthusiastic about the German normal system, which was, in fact, to dominate American teaching

methods until well into the twentieth century, the people were more skeptical.

This institution has passed through all of the experiences in the evolution of our teacher training agencies. From a half year of teaching and a half year of practice teaching it gradually evolved into a normal college (1889) for the training of secondary as well as elementary teachers and in 1906 became a degree-granting teachers' college specializing in the training of secondary school teachers only. In 1914 the name was changed to the New York State College for Teachers which now operates a five year curriculum.

Among its outstanding principals and presidents were David Perkins Page, William J. Milne, A. R. Brubacher and John M. Sayles. This college has not only provided many thousands of teachers for the New York public elementary and secondary schools but has also produced the leaders for new normal schools, teachers' colleges and university departments of education. The 1844 state experiment has proved a great success and at the beginning of its second century of service, the Albany school is outstanding in its field.

Total Failure

IT WAS the end of the term and the silver-haired teacher had been receiving congratulations from pupils and colleagues alike on his completion of thirty years as a successful teacher. Yet each successive visitor left him more depressed than the one preceding. When the last had departed, he cupped his face in his hands and stared at the wall.

A colleague entered, noted the abstraction and depression and offered a few cheering words. "John," said the silver-haired schoolmaster, "I'm a failure, a dismal failure."

"Nonsense," said the colleague. "What did you eat last night?"

"I mean it, John, I mean it. As a teacher I'm a washout. Listen carefully. I've been married for thirty-five years. All that time we've kept a budget, worked it carefully out together and then I gave the wife the money and let her spend it. I needed the time to improve my teaching. I patiently taught her simple bookkeeping and corrected her accounts. It was like tutoring a favorite pupil. I gave my best efforts and she seemed to like it. Nothing enthusiastic, of course, but ever a bright smile and always cheerful.

"Last night we were talking things over. I said, 'Darling, if you had a choice, what would you want most?'"

She looked at me with great seriousness and with *real feeling* said, "Not to keep a budget!"

The Year End

THE public schools are finishing the year in an over-all healthier condition than they enjoyed at any time during either the depression or the early war period. To the superintendent trying to get along

with too few teachers or to certain marginal or sub-marginal districts with inadequate teachers and inadequate pay, this statement may appear to be unduly optimistic.

The favorable factors may be considered as a great revival of interest within the states for the improvement of their public school systems to meet postwar conditions. The creation of survey and planning commissions and the work already accomplished in half a dozen states are most encouraging. Recognition and acceptance of state responsibility for the improvement of public education, if the state and communities desire to maintain education as a state function, are also distinct gains.

The increasing awareness of the vital importance of public school education in a democratically organized culture and provisions for its extension upward through the thirteenth and fourteenth years for all youths are bright spots in state-centered planning. There also seems to be a growing recognition of the fact that education can be improved only as the administrative structure is improved and as districts are created with sufficient resources to maintain satisfactory elementary and secondary programs, backed by the active interest and participation of the people.

Teachers' salaries in fiscally capable districts have been increasing steadily. State appropriations for the support of public education have climbed until they represent almost 50 per cent of the total today.

Communities and states generally have never been in better financial positions. Debts have been heavily scaled down, the tax base for public education has been generally broadened and large surpluses are available in practically every state treasury.

Federal authorities who placed education as a low priority several years ago have now joined with citizens and educators in a huge back-to-school and remain-in-school movement the effects of which will be cumulative in the years to come. Communities are being stimulated to take a stronger interest in public school affairs and community boards of education which have received scant recognition from many educationists in the past decade are organizing on a professional basis and beginning to discover their true and extremely valuable position as community planning and appraising agencies.

There are many weak spots in the operation of public education and the schools are capable of much improvement. Many of these weaknesses will disappear as the states eliminate their obsolete frontier-primary-district systems to meet modern conditions. These structural improvements in 25 states will represent one of the greatest postwar advances. The general educational picture is brighter and the future holds nothing that sound leadership and hard work by layman and professional alike cannot remedy.

The Editor

FEDERAL AGENCIES Compete *for Control of Rural Youth*

ARTHUR B. MOEHLMAN

OPEN competition between the Vocational Division of the U. S. Office of Education and the Extension Division of the Department of Agriculture for the control of rural youth has now reached the Congress in requests for large overlapping appropriations.

The Department of Agriculture organized the 4-H Clubs as a part of extension agricultural service many years ago for the improvement of agriculture and rural life. During the middle of the depression the vocationalists improved on the extension division's idea. Among its diversified youth organizations is the rival Future Farmers of America dedicated to the same purposes as the 4-H Clubs.

Both organizations have been carefully promoted and also carefully controlled by these rival federal agencies. Even during the critical war period, when essential meetings of teachers and superintendents are vigorously discouraged and professional organizations are generally denied permission to hold conventions, the national conventions of both 4-H Clubs and the Future Farmers of America have been carried on with little change except that the number in attendance was somewhat reduced. Smart federal agencies know how to circumvent their own restrictive rules.

"Tear Jerker" Lobbies

The eagerness of these federal agencies to control the activities of rural youth arises from a third purpose carefully kept under cover and smugly rationalized when questioned. This purpose is the exploitation of these youth organizations as emotional lobbies in obtaining appropriations, a natural extension of the always practical and always selfish bureaucratic mind. Professional lobbyists call these youth groups "tear-jerker" lobbies.

Practically every federal depart-

ment, division, bureau and office have tried to develop, and many have succeeded over a period of time in developing, supporting grass roots pressure groups. Few federal executive units have been as smart as the Department of Agriculture in using youth to serve its ends. Imitation of the agriculturists by the vocationalists is an admission of the importance of, and value placed on, these efforts.

Federal Appropriations Sought

While there has been quiet competition between the sponsors of these rural youth groups for years, this fact has only recently been made apparent to the people through special requests for federal appropriations. The Department of Agriculture is now sponsoring a bill (H.R. 4907) which provides for a "4-H Club and Rural Youth Act . . . to conserve the human and material resources of the farm and family, demonstrate practical democracy and citizenship, train rural young people in the efficient production of food and fiber and in the rural arts and crafts, foster health and physical well-being and inculcate in rural youth self-reliance, thrift, love of country." A \$24,000,000 appropriation is being requested for this purpose and for "other extension work with rural youths between the agricultural colleges in the several states and the U. S. Department of Agriculture."

The vocationalists ask \$23,000,000 for "... salaries and necessary traveling expenses of teachers, supervisors and directors of agricultural subjects, . . . other farm vocational educational service programs and activities of the Future Farmers of America; and . . . other farm vocational educational service facilities . . ." in their heavily promoted bills (S. 1946 and H.R. 5079) discussed last month. The exact amount to be used to promote the Future Farmers is purposely not specifically stated.

Few educators would question the educational and social value of either the 4-H Clubs or the Future Farmers of America as instructional activities.

Both organizations carry on a realistic and valuable rural secondary school activity. The 4-H Clubs may be credited in large measure with rescuing the small rural high school from the academic doldrums of 20 years ago.

Both youth organizations are gradually becoming more federal in character through increased state-federal fiscal and administrative controls. Enlarged appropriations for their promotion and expansion will continue to make them even less community-centered and more federally dominated than heretofore. If both bills are approved, unnecessary competition between the vocationalists and agriculturists for the control of rural youth will increase at the taxpayers' expense.

This departmental struggle for power is a beautiful illustration of how expensive an activity may become when federal executive agencies decide that promotion and control are to their advantage. Here is a normal instructional activity which could be conducted inexpensively as part of a total community-centered secondary school program but which demands millions when treated federally.

We Must Answer These Questions

The questions the people and the teaching profession must answer are whether the creation of extensive federal extracommunity educational controls over rural youth is desirable, whether expensive competition between two federal agencies should be permitted and whether federal departments and agencies should be allowed to exploit these controls over youth for departmental budgetary ambitions.

The problem is to keep the idea of these activities separate from the underlying departmental purposes and view these proposals objectively. This approach is necessary since both agencies will immediately raise the emotional screen that "you are depriving youth of its opportunities," if their plans are questioned.

LITTLE children are "scientists" at heart. Even before they are able to walk or talk they set about investigating their environment in an attempt to answer the questions "How?" and "Why?" Why not capitalize on this innate interest? Why not help a child organize and refine his technic? Why not let science begin in kindergarten?

In modern schools children are engaging in a type of science activity from kindergarten on. They collect and study all sorts of plant life and construct aquariums. Pets are kept at school for purposes of observation and study.

The importance of these experiences in natural science is not to be minimized. However, the study of natural or physical science does not make a scientist. It does give a person valuable information that he may be able to use but a child or adult becomes scientific only as he applies the scientific method to a given task.

Five Steps in Scientific Method

It is of primary importance that the teacher herself understand the scientific method of organizing thought and action. It must be studied first from the point of view of the pupil and later be interpreted in terms that young children can understand. Briefly stated, there are five steps in the scientific method, as follows:

1. There must be a serious question or problem which requires a solution.
2. The problem must be defined.
3. The data must be classified in order to form a hypothesis.
4. The hypothesis must be verified by controlled experiment.
5. The entire process must be recorded.

The teacher should have an understanding of the various fallacies in thinking which would destroy this method. She must understand the relationship existing between the use of authority and actual experimentation. In short, either she must find some good courses in reflective thinking and scientific method, or she must make a bibliography for herself and begin a course of home study.

Elliott's "The Process of Group Thinking," Rignano's "Psychology of Reasoning," Cohen and Nagle's "An Introduction to Logic and Scientific

Method," Dewey's "How We Think," Bertrand Russell's "Skeptical Essays" (appropriate selections from this and other works by Russell) and the epilogue from Hoggben's "Science for the Citizen" are good books for the person who would begin this course of study.

After the teacher has a scholarly understanding of this body of information, she is ready to translate it into terms suitable for children. For 5 year olds the language goes something like this. "A science person is a person who tries to find the answers to questions, hard questions that no one else he knows has answered. He finds these answers just one way. He doesn't ask his friend the answer. He doesn't read the answer in a book. He doesn't guess what will happen and call that the

answer. He tries things out until he finds the answer.

"For example, one time a science man had a hard question. He wondered if people could fly. So what did he do? That's right. He tried flapping his arms and found that it didn't work. Then he had the problem of figuring out what he could do to make it possible for people to fly. Each time he thought of something that might work he *tried it out*. Finally other science men began trying things out to help find an answer and soon they had built the first airplane."

The foregoing conversation is not repeated verbatim to children nor is this idea transmitted in its totality in a single discussion period. It is suggestive, however, of what a teacher can do when she first begins im-

SCIENTISTS in Kindergarten



Allowing children to make their own scientific investigations contributes to the development of their powers of reasoning.

*By simple experiments they find the answers
to their questions about natural phenomena*

PEGGY DUNN BROGAN

Sixth Grade Teacher, Glencoe, Ill.

figured out his plan for "trying out" and had someone who could write record the results. After two months of this, the children were performing experiments which gave them important information, such as the following. These show how the inductive reasoning was used by an entire group.

Question 1: If I put water in a jar without a cover, and no one spills it or pours any out, will it al-



These children learned by experiment that water does not remain on the blackboard always. They then asked, "Where does it go?"

planting the idea that "science men find answers by trying things out."

After several short discussions of this sort, children should be given a chance to "try something out to answer a question." At first the teacher may have to suggest a question but soon the children catch the spirit of the thing and bring in all sorts of questions to be answered the "science way." At this stage, the actual questions are not important. It is important to get the group actually to use this "trying out" technic.

There is the example, from my own teaching experience, of the 5 year old who brought in a piece of beef wondering whether a cow would grow if he planted it. He gathered his materials for the experiment and examined the flower pot daily. At the end of two weeks he could see that the piece of beef

was disintegrating (getting smaller instead of growing) so he dictated a description of his experiment to the teacher and ended with "No. Cows will not grow from a planted piece of beef."

Then it was natural to ask how cows do grow and from what. After a discussion about it, the children decided there were no "trying out" ways to use on this question, so each one was to find out about cows from a book or from someone who took care of cows. Thus in a natural way the "place and use of authority" entered the program. At first, the children's questions bordered on the absurd, from an adult point of view, but for each the simplified scientific method was used in obtaining the answer. The child told his problem,

ways stay there or will it go away?

Trying Out: We put water in a jar. We put adhesive tape on the jar to show how far up the water came. We put the jar on the window sill. Each day we looked at our jar. About the third day it looked like some of the water was sneaking out. In twenty-seven days the water was all gone.

Answer: No. Water will not stay in a jar if it has no cover.

Question 2: If I wash the blackboard with a wet cloth and do not dry it off, will it stay wet always?

Trying Out: Barbara washed the blackboard. We all watched it. It began to dry by itself right away.

Answer: No. The blackboard will not stay wet even if no one wipes it.



These children are carrying on an experiment to answer the question, "Does sugar go up in the air (evaporate) as water does?"

In these experiments the children unconsciously used one of the three basic types of reasoning—the method of induction. They began with specific instances of evaporation and proceeded to the general conclusion that "water sneaks out into the air when it is not covered or held in."

After this, there followed a series of experiments which had to do with evaporation. The children discovered that even when a jar is covered the water tries to get out and that drops can often be seen inside the cover. This led to the idea that a person could determine whether or not a substance contained water if he covered it in such a manner that he could detect the evaporation. In the children's language, "If there's water in it, it will try to sneak out and we shall see the drops on the cover." They brought in mashed potatoes, stewed prunes and other things to see whether they contained water. These investigations were also recorded according to the science plan, as follows:

Question: Do mashed potatoes have water in them?

Trying Out: John brought some mashed potatoes to school. We put a glass top on the bowl and put it on the window sill. At noon there were drops of water on the inside of the cover.

Answer: Yes. Mashed potatoes have water in them.

The children also began to won-

der whether other things besides water would evaporate. By now they were familiar with this term. They had discovered that heat makes things evaporate more quickly and one day, while they were cooking sugar and water together in preparing cranberry sauce, they saw the steam and wondered whether the sugar was escaping with the water.

One child suggested that the ceiling would be sticky if sugar evaporated, so one of the taller boys climbed on a chair and felt of the ceiling. He reported that it was not sticky. Another child suggested that if sugar was placed in a jar it would disappear as the water did, if sugar could evaporate.

This was tried out. After further discussion, the children decided to forget the cranberry sauce for a while and let the sugar and water boil until there was nothing left. Then they could look into the kettle and really know. As the heat was turned up, the liquid disappeared more quickly. Just when they were about to be convinced that the sugar was evaporating too, the last drop of water went up in steam and a brown sticky mass of burned sugar appeared in the bottom of the pan. Another question had been answered in the science way.

It is important to emphasize that all of this was not "accidental learning." If the teacher herself had not understood this method of problem

solving and had not been able to help the children organize their experiments into meaningful experiences, the value of the procedure would have been relatively worthless.

Interestingly enough, this "science way" involves more than a mere methodology for attacking problems concerning our physical environment. It is concerned with the type of reasoning used by many people and with typical fallacies in reasoning. The teacher who has a scholarly understanding of this method and all that it implies can give her children all sorts of meaningful experiences. Five and 6 year olds have tested categorical syllogisms (not using those words, of course).

For example, a typical categorical syllogism was presented to them as a puzzle.

All children have nickels.

Betty is a child.

Betty has a nickel.

They soon discovered that something was wrong because Betty didn't have a nickel, even though it seemed reasonable to assume that the first statement was true. Next they knew that the "something" that was wrong was the unproved major premise.

Reasoning Power Will Develop

As these children become more mature they will learn to recognize certain errors in reasoning resulting from such things as the weaknesses and shortcomings of the observer, lack of precision in the instruments used, wrong inferences, too few observations, incorrect manipulation of the mathematical data and so on. They will learn that, besides the single experimental method, there are methods using two or more equivalent groups and rotating groups. They will learn to permit only one factor to operate at a time and to observe other restrictions governing the law of the single variable.

They will learn to understand reasoning from analogy, from the known to the unknown, from the familiar to the unfamiliar. They will learn to be on guard for the various causal relationship fallacies. And so on through the great store of knowledge which requires the use of the scientific method.

So here we have elementary school science considered in an entirely new light, as a method for action in solving problems.

BUSINESS looks at EDUCATION

THE good society is one in which free men individually acknowledge their responsibility to conduct themselves under laws of their own devising in a manner which accords due respect to the rights and dignity of all.

Such a society makes practical application in its political and economic life of that moral principle so widely known and so little practiced, the Golden Rule. Historically, this type of society seems to have been most nearly, though as yet imperfectly, attained in democracies and the best example of it so far is to be found in our United States.

The whole idea of democracy, however, is currently under challenge and the greatest war in all history is now being fought on the issues it raises. Although the final outcome is no longer in doubt, it nevertheless remains a fact that the democratic way of life has had a pretty close call.

Pupils Must Study World Problems

Today this is a weary world full of trouble, with human beings largely engaged at the moment in their own destruction. There is much to investigate and to learn as to how modern society got this way, how this mass suicide can be stopped, how repetitions of this sort of thing can be avoided in the future and, most urgently and particularly, what had best be done here and now in the interests of our own country.

These are the questions with

which the boys and girls you are now teaching will have to deal successfully, much more successfully than our generation has been able to do so far, if the way of life, the advantages of which you and I enjoy, to say nothing of the realization of the dreams of the America that we have envisioned, is to endure.

American Traditions Must Be Held

During this war emergency we have all cheerfully submitted to varying degrees of governmental regimentation and direction of our activities, industrial and educational, for the purpose of promoting the war effort. There are those among us who feel that some fundamental change in the freedom which has characterized our way of life in the past is desirable, but most of us, I hope, prefer to work out our destiny on a more American basis.

We hear more or less about a "planned economy" but the question seems to be largely one of who will do the planning—the government bureaucrat or the people. American industry has been built with capital accumulated through the thrift of our people and expended by those with the vision to plan for the satis-

faction of the people's needs and desires. The services of American business are assayed in the competitive markets by those same people, its customers.

Do not overlook the fact that a government which plans what industry will produce also plans what people will buy, where people will work and, if you please, what teachers will teach and how they may teach it! Industry is solidly against this idea which the demagogue misrepresents as progress but which history describes as reaction. The greatest material advancement in the standards of living and the marvelous progress in the arts and sciences of the past century have been made principally in those countries which were *free*, in which democracy was believed in.

Freedom Necessary to Progress

This is not to say that there is no room for improvement in our social standards and our economic practices. There is plenty of room for this, but the democratic man holds that progress should be encouraged and achieved through peaceful, evolutionary means growing out of convictions developed through the free interchange of ideas.

The improvement of our democracy will depend upon our understanding one another's problems and points of view and the promotion of cooperation between education and life activities toward the building of a greater United States of America where truth, justice, prosperity and happiness will ever increasingly prevail.

When contemplating educational, business, political, religious and social activities, it is necessary to differentiate carefully between the functions of each and the personal practices and proclivities of the individuals engaged in them. There are just as many different kinds of business men as there are different kinds of teachers. There must be. We are all just ordinary human beings, grown up in the tradition of Americanism, the product of America's educational system.

The function of business and industry is impersonal and objective. In ordinary peace times, this function is the organized production and exchange of goods and services. It is an important aspect of human activity, as are agriculture, education, politics and soldiering. Relatively

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speaking, industry, as a human activity, has grown during the last century and a half as compared with agriculture because the mechanization of farm work has released manpower and made it possible for us all to get enough to eat if one man out of five works on the farm where formerly the services of four men out of five were required.

What is the function of education in this democratic scheme of things? Teaching is the most fundamental and essential activity in our life. Without it, no phase of what we cherish as our civilization could be perpetuated beyond the present generation. In a certain sense we are all teachers, just as we are all students, or should be, if we expect to continue to grow and expand. To you, however, who have elected teaching as a life's work, as a profession, it must be a particularly soul-satisfying experience to realize that you are entrusted with the prime responsibility for instilling in the minds of the young those ideas, attitudes and values which are at once our heritage of the past and our foundation for the future.

The end objective of education is the making of men and women, in the highest sense of the word. It serves to inspire and guide each individual through childhood and youth to a well-rounded maturity. To be truly successful, the end product must be men and women who have developed character at the same time they have acquired knowledge.

We can train animals but the education of youth involves a human awakening. The prime goal of education should be to enable each individual to attain an inner spiritual freedom to liberate him from the bonds of ignorance and prejudice through the acquisition of knowledge and wisdom. Specific training in the arts and trades helps the individual to lead a normal, useful and cooperative life in the community but this, it seems to me, is a secondary aim of education.

When the primary emphasis of educational activity is diverted to such avowedly utilitarian ends as mere training, education can, and on occasion does, degenerate into such evil manifestations as the Nazi training schools and youth organizations

where all sense of truth in the human mind is smashed, all moral values are perverted and the individual is relegated to being merely a part of the technical equipment of the state.

My principal observation of education in general is that our modern educational approach does not sufficiently differentiate between what I choose to call education and training. It tends to put undue emphasis upon mechanical and technical training to the neglect of the imparting of knowledge and the development of character.

The laboratory, the manual training classes, the cooking schools have their place in our educational paraphernalia as tools to impress the minds and imbue the souls of the young with the facts that this is a material world in which we live and that there are practical material problems in it with which we must deal. All this is important. Some of the most troublesome people with whom the world has to deal are those impractical dreamers who approach the problems of life as mere theoretical abstractions, but the utilitarian aspect of education must be kept subordinate to what seems to me to be the ultimate fundamental objective—the making of men of character and good will.

Moral Training and Wisdom Needed

I am suggesting to teachers that the real problem to be faced is not how we can train more and better plumbers, doctors, mechanics, lawyers and engineers but how we can rear successive generations of free men and women with the courage, the vision and the wisdom to preserve, cultivate and improve the finest heritage mankind has yet devised.

The demagogue has always sought for his own advantage to tear down the existing order rather than to strive for its improvement and there are those among us today who are eagerly resorting to this historic pattern. Their appeal is to ignorance, selfishness and hate and the only effective counter to their disruptive influence is the cultivation of an intelligent love of truth and an inherent attitude of good will in each of us toward our fellow man. Such an understanding is the peculiar province of the teacher and too little recognition has been accorded this fact by most business men.

The A.A.S.A. Plans a Membership Campaign

THE American Association of School Administrators is planning a general membership campaign for the current year. It is hoped that the current paid membership of 5644 can be increased to 7000.

This organization should have at least 10,000 members. Much of the apathy on the part of administrators is in the smaller districts and counties where superintendents or supervising principals have scant opportunity to attend annual or even regional meetings. The American Association of School Administrators furnishes professional services in addition to the stimulus of its meetings that in themselves are worth the membership fee.

Active membership is open to all members of the National Education Association who are engaged in supervisory and administrative positions, namely, state, county and city

superintendents and supervisory and administrative officers in city and county school systems exercising the functions of associate, assistant or deputy superintendents; all state and national officers of educational administration; the heads of teacher-training institutions, colleges and universities having departments or colleges of education, the heads of these departments or colleges of education and professors of school administration or supervision in these institutions.

All members of the National Education Association who are actively engaged in any phase of school work may become associate members of the A.A.S.A. by paying the regular membership fee of \$5. They are entitled to all the privileges of this association except the right to vote and hold office.

A problem arises and we make a survey but surveys alone are not enough. Few lead to intelligent action, says this writer. Hence, they are futile and our problems must remain unsolved.

SURVEYS

No Cure-All

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Children's Psychiatric Service
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INDIVIDUAL psychopathology can be summarized briefly as the inability to solve major problems by means other than choosing some form of escape from the problems. Abandon to alcoholism, paranoid projection, schizophrenic withdrawal or hypochondriacal "bellyaching" makes it unnecessary for the person to square himself with disturbing realities.

The only effective therapy is one that recognizes, and helps the person to recognize, his basic conflicts, with the persistent aim of bringing about a practical and realistic solution.

As a society, we have come upon similar ways of getting away from the need for immediate embarkation on finding the remedy for unpleasant actualities. In the not too distant past, pseudotheological reference to the inscrutable designs of the Deity provided an avenue of escape from human responsibility. When this reference began to lose much of its appeal, a new type of flight came into being.

Symptoms Blind Us to Causes

Whenever there is anything undesirable in our social structure, you don't have to do anything about the fundamental factors underlying the deplored symptom. You don't even have to view it as a symptom. The hypochondriacal "bellyacher" does

not view his gastric discomfort as a symptom; having successfully bypassed the basic issues, he sees the main trouble as his aching, forever belching stomach.

Society has many undesirable symptoms of disturbance. Some of them are wars, poverty, unemployment, race prejudice, delinquency, venereal disease. What does society do about them? Does it go forth with a serious effort to square itself with the deeper causes and motives underlying the symptoms?

"We Need a Survey!"

For the most part, it does nothing but wait more or less watchfully for the next ache or belch to come along. When it does come, then the war is being fought, the poor and unemployed get "relief," the race riot is hushed up, the delinquents are jailed and the syphilitics are given treatments. From time to time, however, when the social stomach is too upset, a cry is heard all over the land. The press of the nation groans with pain. It declares that *something* must be done. Then comes action. The action takes the form of recording and counting the aches and belches. This counting is given the dignified name of "survey."

The surveyors, after laborious research and statistical calculations, bring on their impressive figures and

the nation is duly alarmed. Eventually, the numerical depositions, having been rehashed in committee meetings and conferences, come to rest in filing cabinets, appear in footnotes of textbooks and occasionally are incorporated in the literary miscellany called the *Congressional Record*. The national stomach relaxes until a new bout of cramps results in new wailing and another survey.

One of the most recent surveys was conducted and reported by the custodians of our selective service candidates. It caused the country to sit up and take notice of the grave condition of its health. On July 10, 1944, hearings were held before the Senate subcommittee on war-time health and education, under the chairmanship of Senator Claude Pepper. Among the participants were Paul V. McNutt, chairman of the War Manpower Commission; Maj. Gen. Lewis B. Hershey, director of the Selective Service System; V/A Ross T. McIntire, surgeon general of the Navy; Maj. Gen. George F. Lull, deputy surgeon general of the Army; Col. Leonard Rowntree, medical director of the Selective Service System.

The Survey Shows We Are Ailing

This august body of experts had counted the noses of rejected inductees and had come to conclusions which caused shivers to run up and down the spines of our newspaper men. Headlines of mammoth proportions reiterated some of the gruesome adjectives which had been bestowed on American manhood by the appalled surveyors, and headline writers added disconcerting epithets of their own. Thus we learned that we are an ailing, soft, flabby, decaying nation. Doctor Goebbels didn't even need statistics to tell us that some time ago.

Such an indictment should not be taken lying down, regardless of the source from which it comes. Meek acquiescence would indeed be a sign of flabbiness. It is true, perhaps, that we have a peculiar capacity for letting people get away with none too flattering notions about ourselves. To the average prewar European, we were a multitude of hurried dollar-chasers who took just enough time to dodge gangsters' bullets at every street corner. In World War I, on the basis of selective service statistics, we shamefacedly accepted the dictum that we were, as the saying went, a

nation of morons. Our intelligence was said to be low grade.

It may seem worth while, first, to strip the most recent indictment of its sensationalism and then to see how much of it still remains valid. Concerning the first portion of the task, the following considerations are suggested:

1. If you are willing to discount the phenomenal life span attained by early Biblical personages, this "ailing" country of ours has reached the highest peak of longevity in the recorded history of mankind.

2. Even though we are by no means rid of hunger, illiteracy and slums, we are, comparatively speaking, the most adequately nourished, schooled and housed nation on this earth.

3. Our armed forces, the men who were not rejected at induction, are doing magnificently in all areas of combat. Even Doctor Goebbels and whoever his Japanese counterpart may be have found that out to their great dismay.

4. We are so "flabby" that most of our rejected 4 F's make noticeable and much needed contributions to the war effort in factories, farms and offices; a few of them have even distinguished themselves in national athletic contests.

However, says the indictment, four million people have been disqualified from service and fully one fourth of this number have been rejected for psychiatric reasons. This is true enough. It is not true, though, that disqualification from military service means that a person has one foot in the grave or awaits an ambulance to take him to the nearest mental disease hospital.

The Facts Are These

The number of rejections depends upon the standards set by the people in charge of selective service. The physicians who serve at the induction stations have been made acquainted with these standards by the military and have always cooperated in the full spirit, if not to the letter, of the specifications, which are fair and, on the whole, well conceived. Many post-induction casualties, as a matter of fact, are men who should have been rejected in the first place; they were passed often because of the unequal caliber of the specialists at the widely scattered induction stations.

This is a time of war and a sturdy,

vigorous Army is needed. Dare anyone say that our nation has been incapable of producing such an Army? Have not our armed forces, after much shorter training, done better than the professional conscript armies and navies of our enemies? Is this an indication of ailment, softness, flabbiness and decay?

Nevertheless, we have learned a great deal from the survey. We have learned that, though we are not an ailing nation, we could be a healthier nation. We have learned that one third of the men of military age presented physical or emotional problems which made them unsuited for combat. It would be a tragedy if, in time of peace, fitness for combat were to be made the yard stick of health; we are not, and do not wish to be, a nation of warriors. But the presence of noticeable imperfections in one third of any group should disturb our complacency.

Surveys Should Lead to Action

The survey shows that a large number of the imperfections of our draftees are remediable. A hernia can be operated on. Dental defects can be taken care of. But surveys alone won't do it. In fact, the survey now under discussion goes to prove the futility of surveys which are not followed up by service.

Senator Pepper called attention to a medical survey made several years ago in the public schools of Hagerstown, Md. When the boys of these schools presented themselves for induction, many of them were rejected for the very defects which had been disclosed in the earlier survey. And there is no reason to believe that the present survey has corrected the defects.

Surveys that do not lead to service are useless. They are a form of society's escape from unpleasant realities. They are like the conferences that do not lead to action. I recall a sordid affair that involved an innocent child's inhuman suffering. Several agencies, including courts and welfare groups, were "active on the case." For months, nothing was done to remove the child from the place of his tortures. An urgent appeal to the agencies resulted in the assurance that they were, indeed, very busy on the child's behalf. Why, they had held a dozen conferences and a new conference would be called in the near future.

Surveys have value solely as prefaces to service. Invitation to country-wide ululations is not service; nothing is gained by choral groaning over counted "bellyaches." Adjectival name-calling is not service; sensational labels do not change matters one way or another. Even symptomatic attention to the sundry social aches and belches is not real service; the fundamental problems remain untouched. Hence, we have crowded sanatoriums for ever new victims of tuberculosis, overstocked (and understaffed) mental disease hospitals for people who have not been kept from falling by the wayside and a never ceasing flow of people into prisons and reformatories.

Real service, making socially intelligent use of surveys, tries to create opportunities for dealing practically with basic problems, instead of limiting itself to half-hearted patchwork with some of the resulting symptoms. Many millions are spent annually for the patchwork but precious little for the study of, and attack on, the causes and motives underlying the problem.

A large portion of the rejected four million would unquestionably be suited even for combat if concerted planning and doing had gone beyond mere surveys and forestalled the lamented physical and emotional shortcomings. The members of Senator Pepper's panel themselves pointed that out.

Escapist Hurdles Still Remain

This ought to teach us a lesson but I doubt that it will, at least for some time to come. For between health surveys and health services stand a number of escapist delays which have in common the surrender of human welfare to pet political, economic or bigoted preoccupations. They present themselves as controversies about states' rights, as bickerings about the slogan of socialized medicine, as legislative penny-wisdom and pound-foolishness, as conventions which demand that children be taught about the adventures of the Phoenicians and Charlemagne's exploits but, for Heaven's sake, be kept ignorant about the elementary facts of contemporary conflicts.

Only if these escapist hurdles have been taken, will the well-being of this certainly not "decaying" but hopefully progressive nation be further improved by the advance from surveys to service.

SCHOOL OPINION POLL

EACH MONTH A QUESTIONNAIRE IS MAILED TO
500 REPRESENTATIVE SCHOOL ADMINISTRATORS

What Kind of School Board Members?

THIS month's questionnaire reveals that more than half of the superintendents questioned concerning school board members believe that parents are best qualified to help solve school problems. Parents, particularly those with children of school age, superintendents say, have a reason for interest in the welfare of the school and the development of children.

Forty-two per cent believe that merchants experienced in meeting the public also make effective board members. Doctors and lawyers come next on the preference list, with 8 per cent considering farmers to be capable board members.

The poll showed sharp differences of opinion concerning the importance of the business or profession of the school board member and the amount of his education. Questionnaires were sent to 500 superintendents, 32 per cent of whom had responded by closing time.

Most superintendents say that the business or profession of school board members should not be considered. As the superintendent from Rapid City, S. D., says: "Vocation does not have much to do with a person's suitability as a board member. It depends on the individual's civic interests and his understanding of the importance of good schools."

Some superintendents feel that certain business and professional people take advantage of their position on the school board for personal gains. "Too many of our board members in smaller communities are hindered by fear of loss of business in acting intelligently and honestly," asserts Clifford O. Vincent at Rose Creek, Minn.

However, there are some superintendents who feel that professional men and successful business men and women more readily grasp the whys of new equipment and keep in step with the times than others. C. F. Daberkow, superintendent at Snyder, Neb., says: "Professional people are

usually aggressive leaders in community improvements and will want the best educational facilities, even at a somewhat greater expense. Business men should be on the board because they have had experience in dealing with the public and understand the problems of teachers. They can see the advantages of progressive work in the school."

Superintendents also differ greatly on the amount of education school board members should have. While many say it is the individual and not his education that matters, several agree

with this statement of the superintendent at Monticello, Utah: "If we do not make some qualifications for our school board members, schools are not going to progress beyond the education of the school board members."

However, most superintendents assert that interest in the school and willingness to give time to school problems overrule educational requirements. The superintendent at Sandlake, Mich., writes: "The board member's interest in the school is more important than the year he left school."

Although most of the superintendents agree that the ratio between men and women on school boards should not be the determining factor, women come in for a considerable criticism as to their abilities as board members.

Women, many superintendents feel, are too prone to emotional judgment. However, several schoolmen come to their support by agreeing with the statement made by the superintendent at Silver Creek, Neb., who says: "The most effective school board member with whom I have worked was a woman who was a former teacher, a college graduate, a parent and a farmer's wife."

Various state associations of school boards evidently agree with some of the superintendents' criticisms since they have been taking definite steps in recent years to improve the quality and scope of information provided for school board members.

For example, in Connecticut, a series of informative booklets on basic educational policies has been prepared by the state commissioner of education in cooperation with the school board association. In Illinois, a public school study commission consisting of school board members and professional educators has been sponsored by the state school board association. It has already issued one report in a proposed school board reference library and has 20 to 30 reports in preparation.

QUESTIONS ASKED OPINIONS EXPRESSED

1. Who, in your opinion, make the most effective school board members? (Multiple choices permitted.)

Parents	58%
Merchants	42
Doctors	31
Lawyers	29
Business and Professional Women	21
Former Teachers	21
Bankers	20
Engineers	14
Manufacturers	13
Dentists	12
Labor Leaders, Realtors, Farmers	8
Contractors	7
Teachers	2

2. What should be the legal educational qualifications of school board members?

High School Graduation	54%
College	22
None	21
Ninth Grade or Less	3

3. What should be the ratio between women and men on five or seven member boards?

2 to 5 (or 7)	37%
1 to 5 (or 7)	35
3 to 5 (or 7)	9
All Men	4
Ratio Unimportant	15

The PLUS VALUES *of Military Training*

AS ONE who, for the last forty years, has been associated with a military school either as a cadet, a teacher or an administrative officer, I naturally believe in military training.

The school of which I am the acting head while the superintendent is serving with the Army in France has, since its foundation fifty years ago, been a military school. We have believed and have proved to our own satisfaction that a military mode of life, properly coordinated with academic work, not only invigorates the study program but develops in youth certain basic characteristics which are important in a well-rounded civilian life. For these reasons we have been and will continue to be a military school.

A National Defense Measure

In addition to these educational values of military training, there is the important question of its contribution to national defense. The record of the R.O.T.C. and its graduates speaks for itself in this war. The expansion of our Army at the beginning of the war was made possible by the fact that we had at the outset approximately 100,000 reserve officers, most of them products of the R.O.T.C.

Since it is our belief that military training is of distinct value to those young men who are fortunate enough to receive it in military schools and military colleges, we naturally believe that a year of Army or Navy training could be made into a rich educational program for all young Americans. This opinion is offered independent of the fact that some plan which will provide for universal military service now seems mandatory if we are to be prepared for the defense of our existence as a nation. This stern necessity we have heard emphasized by

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our most eminent military leaders and statesmen. It is one of my purposes to point out that the "stern necessity" may be made to offer us real opportunities and advantages.

An advantage which, in some respects, stands out above all others is the fact that every American youth, no matter what his social, financial or intellectual status, would for one year live the same life as every other young man, wear the same clothes, receive the same pay, eat the same food and do the same work. Is there any doubt that such an experience would be exceedingly beneficial to the individual and to American society and democracy?

The giving of a year of service by every young man would in the very act tend to impress upon him the responsibilities of citizenship. Americans are becoming more and more aware of the fact that they have neglected, especially during their prosperous periods and in their more prosperous areas, the problems of community, state and nation. Our most promising young people have been all too eager to achieve personal success in business or a profession and to "settle down," which often means to immure themselves against whatever may be happening in the world outside their own comfortable interests. This seclusiveness, this unawareness of the thought and the struggles of other Americans, a universal military service can do much to remove.

The possibilities are illustrated in countless reactions coming out of the American billets all over the world today. In the many letters, which our faculty members and the editors of our publications receive, we are repeatedly impressed by the

accounts of vigorous and significant conversations among young soldiers, chiefly about questions of values. Ours is clearly a talking and thinking as well as a fighting Army. We may hope that its men will return to their homes with a widened understanding of our people as a whole and a determination to make a better nation of us.

Technical Skills Can Be Acquired

It is estimated, I believe, that only about 10 per cent of our young men enter college. A year of service in the Army or Navy would provide the opportunity for developing many technical skills and would give experience in many activities which could be applied to the business of making a living in civilian life. There are the highly technical courses in motors and radio on the one hand and, on the other, such experiences as keeping records, running messes, dealing with personnel.

Finally, there would be the great advantage of a well-planned course of physical training, instruction in sanitation and hygiene and the correction and beginning of treatment for many physical disabilities. Large numbers of the young men who have been called for induction under our existing selective service laws have been rejected for physical disability of some sort, including a high percentage rejected for psychoneurotic tendencies, which is a situation to cause as grave concern for our peace-time as for our war-time well-being.

A wisely planned service act would aim at improving the health of our whole population, not just our potential warriors. To obtain the maximum benefits, the physical requirements for service should be set at a low enough level to make practically all eligible who are not physically incapacitated or are not actually in-

valids. The young men who could never be qualified for combat duty in time of war would nevertheless benefit greatly from being integrated with perfectly normal young men of their own age for a year of training.

The age for selection is a question that should receive careful study and consideration. The most frequently discussed proposal is that a young man be called for service upon reaching his eighteenth birthday or upon graduation from high school, whichever comes the earlier. Opposition to this policy has been based on the argument that many young men after a year in the Army or Navy would not continue their education at the college level.

Is it not possible that most decisions about further education would be wiser (especially if guided by expert counselors which the training camps could provide) than those our high school graduates now make

and might result in a much more serious purpose and a better preparation for solid work on the part of those who do go on into education at the college level?

If it is felt that the break between preparatory school and college would result in too great a loss to the colleges and to higher education, a plan could be produced which would make it possible for those young men who elect to go to college to take their year's training during four summer periods of three months each. The pay received during these periods of service would assist them in meeting in part their expenses at college. Such a plan could well be tied in with R.O.T.C. training so that those who elected the R.O.T.C. and carried the courses in college could put in a part of their twelve months' service in training for a commission in the reserve.

With the possibility of such a plan,

it is difficult to see any valid argument against a year of universal service other than that based on the more or less traditional prejudice against things military. It is true that Germany and Japan have used compulsory military training to glorify war and to ingrain in the spirit of youth the qualities that have brought on two world wars in the last twenty-seven years.

However, Switzerland, with what is one of the finest systems of universal service in the world, has, because of such a system based on democratic principles, been able to avoid invasion for generations, even though war has raged on every side of her. Universal service in the United States should, of course, be based on the American way, the democratic way. The many advantages to her youth physically, educationally and morally would far outbalance any disadvantages.

The CASE AGAINST *Compulsory Military Training*

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IF THE House and Senate bills for compulsory peace-time military training¹ are passed on any other grounds than strict military necessity, American democracy could hardly suffer a greater defeat at the hands of its elected representatives. The proponents of these bills have made no case for military necessity but instead have claimed that educational advantages are to be derived from Army and Navy training.

The claims sound plausible and many educators have failed to perceive their sinister significance. They have failed to discern the bolstering of a weak military case by specious educational arguments. They have failed to realize that military and educational programs are separate

problems and that in "passing the buck" to the military they are making a confession of bankruptcy.

It is time for the many who have convictions as to the place of education in a democratic society to make their voices heard, to clarify the issues.

Six propositions are presented herewith to clarify the issues and provide a basis for meeting the present crisis.

1. Education is a civilian and not a military function. The military function is to train for war. Society has set up the schools to extend the home environment of our youths in order to promote their physical, mental and moral development.

2. Military necessity is the only valid reason for any plan of universal compulsory military training. Only

if it is necessary for the security of our country in the postwar world should it be provided and then be made as "educational" as possible under the circumstances.

3. The case for military necessity must be made much clearer than it has yet been made. Even on military grounds, the plan is not acceptable unless the dozen or more other plans for postwar security are shown to be inadequate. Among these are voluntary enlistments, voluntary summer encampments, officers' candidate schools and military scholarships, to say nothing of research and constant planning on military and concomitant industrial problems to retain the United Nations' lead in these matters. We should not be left to conclude, as we have been thus far, that universal compulsory military training is the only solution.

4. Universal compulsory military training is contrary to our long estab-

¹S. 701 and H.R. 1806, introduced Feb. 11, 1943, by Chan Gurney, South Dakota, and James W. Wadsworth, New York, respectively, and H.R. 3947 introduced by Andrew J. May, Kentucky. These bills are now before the military affairs committees of the two houses.

lished democratic social and educational policy.² Where it has been practiced, it has tended to create a dominant military caste, it has failed egregiously to prevent wars, is a stimulant to truculence and aggression and is a constant threat to world peace. But, what is perhaps more important educationally, it calls for a centralized bureaucratic control instead of control by states and communities. It is not necessary to plunge even for one year into all-out centralized control.

5. The remarkable success of the military training programs has been due in large measure to the efforts of those who are responsible for our educational system. Teachers, principals, superintendents, professors and research workers in and out of uniform have organized the courses of study, written the manuals and trained the teacher officers. They can provide an effective civilian educational program with adequate support and leadership.

6. It is now the responsibility of educational leaders of the country to carry on. They must see to it that the deficiencies in the educational program are corrected, not by patchwork but by developing a more complete concept of the education function and carrying it forward.

If these six propositions are accepted as sound, they carry this clear implication: *The time is now ripe for the planning of definite action on a large scale to provide an educational program that will satisfy the needs of American democracy.*

The education function must not be allowed to go by default to an agency of the government that was set up for an entirely different purpose. The task before the leaders of American education is to develop a plan of cooperation with the other civilian agencies of society which will be so good that it will receive the enthusiastic support of the American people.

The military propaganda for universal compulsory military training on educational grounds points to the weak spots and so indicates some of the first things that must be done. What are the educational arguments³

put forward in favor of universal compulsory military training?

These arguments are presented in various ways and with varying degrees of emotion and logic but they all come down to five unsupported claims that universal compulsory military training will (1) develop physical stamina, (2) improve health, (3) provide vocational guidance, (4) give vocational training and (5) develop character through discipline and service to the country.

If civilian agencies can and should take the responsibility in these areas, as we have assumed, we should examine each one to see what might be done.

1. Physical Stamina. Physical stamina cannot be developed in one year. It involves a long process of growth and maturation and incorporates hereditary and environmental factors. What is needed is a clearly defined, vigorous policy worked out in cooperation with communities to correct the present deficiencies in the health and physical education program. Such a program should include a wide variety of activities with emphasis on, and adaptation to, individual needs. It should definitely not be a blanket program for all.

2. Health. Schools have furnished some health instruction and have cooperated with parents and community health agencies in a health program. The results have not been gratifying. The problem is a difficult one but medical attention at age 18 is no solution. If the health of the soldier is of importance to the country, that of the civilian should be no less so.

A definite policy could undoubtedly be arrived at cooperatively, by representatives of the schools, the medical profession, the health authorities and responsible social and civic agencies. As educators concerned with the development of all our young people, we can no longer subscribe to the principle that health measures should be applied in proportion to the financial status of the family.

3. Vocational Guidance. The function of a guidance program should be to help young people make wise decisions on the basis of adequate information. Vocational guidance for the relatively small number of skilled and professional occupations is an important part of the program. The techniques are sufficiently advanced to render valuable help and need only

be recognized and supported. An adequate plan worked out by educators in cooperation with psychologists and certain community agencies would by comparison reveal the inadequacies of the procedures that could be employed during one year under military auspices and would assure a continuing program of guidance, educational and vocational.

4. Vocational Education. Vocational schools, vocational curriculums and apprentice programs are now in operation. The movement to provide vocational education has been under way for many years. The course has been laid. There is no reason to abandon it.

5. Character. The schools and other social institutions have for generations developed in America a citizenry of which we can well be proud, without benefit of uniform. They have done this without recourse to the selection and wash-out system and they have not assumed that one kind of training and experience is good for everybody. They are developing democratic procedures which are appropriate for a democratic society. They have provided for maturation without taking credit for it. Psychologists, educators and community leaders could work out a desirable and effective program cooperatively which would adapt to the needs of young people in school and out and provide the opportunities for wholesome living.

No revolution is here advocated. Instead, it is revolution that should be avoided. But we must recognize the nature of the crisis which confronts us. Our democratic school system and our democratic social organization are seriously threatened. We must act quickly and vigorously. The leaders of education in the several states could take the initiative. A time of crisis is a time of opportunity.

We can meet the challenge, if we will, but we must meet it with plans that are broadly conceived, vigorously advocated and boldly executed. No single formula will be adequate. Details must be worked out cooperatively and be adapted to local conditions. Other areas than these here discussed may well be included but since education is the function of the several states, the states are responsible for failure or for success. Agencies of the federal government can be called on to cooperate but they should not be invited to take over.

²See a discussion of this point by Charles A. Ellwood in the Journal of the National Education Association 33:111 (May) 1944.

³I have discussed these arguments in detail in an article appearing in the November issue of Educational Leadership, pp. 13-18.

Two Heads Better Than One

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THE American public school, particularly in cities and villages, is not as close to the people as it was in its earlier days. To be sure, large numbers of parents visit their children in school and through their parent-teacher associations discuss the problems of education but the formulation of policies and action on these policies is, necessarily, left to the elected representatives of the people, the members of boards of education.

Schoolmen Need Citizens' Help

Professional educators and members of boards recognize the desirability of keeping the schools closely in touch with the desires of the people whom they serve and realize that board members and school employees do not have a monopoly on ideas for improving education.

J. Cayce Morrison's article in the October issue of *The NATION'S SCHOOLS* described an instrument called "A Manual for Community Participation in Educational Planning." This manual provides an opportunity for members of the community to study problems confronting boards of education. It also serves the purpose of giving the school board the benefit of the considered judgment of laymen with respect to their school system in the postwar period.

There are many ways of inaugurating and carrying on such a study. At Ithaca, N. Y., the superintendent of schools, the assistant superintendent, the president of the board of education and the chairman of the state committee which formulated the manual (who also happens to be a member of the Ithaca board) met and adopted the following procedure.

A list of 18 citizens was carefully assembled, with substitutes who could be used if necessary, for assignment to the general committee and the three subcommittees for which the manual provides. Each of the persons on this list was a leading citizen in the occupational, civic, social and

economic life of the community. Included were representatives of industry, labor, the chamber of commerce, Cornell University, the churches, public health, racial groups, the council of social agencies, the community chest, the press, business and the farm home. Inclusion of the last named is explained by the fact that Ithaca has a large nonresident enrollment from the adjacent rural area. Each of the persons on the preferred list accepted committee responsibility when asked to do so.

Secretaries from the board of education staff served as secretaries of the three subcommittees, distributing materials, obtaining requested facts and figures and taking notes on the discussion at committee meetings.

A general meeting was held to which all committee members were invited. Each was given a manual and time was taken to skim the several sections and to discuss the purpose and plan of organization of subcommittees. Each committee voted to begin work at once. Each committee found it necessary to hold three or four meetings, for periods of from one and one half to three hours, each. Attendance at meetings was exceptionally good.

Community Factors Studied

While a long statement could be written about the work of each committee, space permits only a brief comment about each. Committee 1 studied population, economic conditions, problems that demobilization will create, the homes of Ithaca and other community factors. Certain phases of reports made by a chamber of commerce committee on postwar planning were used by this committee, especially data collected on forms provided by the national committee on economic development.

The committee naturally had to do some guessing but, whenever possible, all available factual data were used. Questions were penetrating and discussion was lively. The committee assessed the resources of the community rather carefully and came to the general conclusion that few, if any, major changes in population,

Schools benefit when educators and leading citizens study school problems together and plan for the future.

economic factors or home life could be expected by 1950. It did point out some recommendations for the use of the other committees.

Committee 2 modified the wording in the manual in many instances. For example, it substituted for the manual statement, "The educational program should ensure that each child achieves," this modification: "The educational program should ensure that each child acquire within the limits of his capacity." The committee accepted some statements entirely; others, with a conditional statement of its own. Several new statements were added in places provided for the purpose in the manual; one with reference to health education and examination, another relative to education for former service men and a third, which is significant as a lay statement, as follows:

The position of the teaching profession should be so challenging and satisfying that youths with the finest minds and characters are attracted to the teaching profession. Likewise the position of teachers in the Ithaca community should be such as to attract the very finest people in the profession to the Ithaca schools.

Committee 2 commended such phases of the program as nursery schools, noon meals for pupils, guidance and counseling, trade and industrial education.

Recommendations Made

Committee 3 employed eight work sheets for its indication of deficiencies and its recommendations, ranging from nursery schools to health education. For example, it was recommended that nursery school education "should be provided for all children for at least one half day daily for one year, . . . with a nom-

inal charge to cover food and other items." This would be at community expense after the withdrawal of the federal and state program, provided there are no new federal or state-aid programs.

An expansion of adult education services, especially guidance and counseling, was recommended for out-of-school youths of any age. Appointment of a psychiatric social worker was recommended. Cooperation with labor and management in occupational training and placement services was endorsed. Coordination of various community programs in recreation and leisure-time activities was recommended.

All of the foregoing is illustrative of the type of recommendations made by the three committees. After all reports were completed, the general committee met and reviewed the reports of the subcommittees, each of which was presented by its chairman. Following minor modifications, the reports were presented in final form to the board of education at a special meeting called for the purpose. Board members asked many questions and received the reports with evident appreciation. They will act on the several recommendations and proposals from time to time, as changes in the school program become advisable.

First Action Already Taken

One recommendation, that which relates to counseling services on the adult level, has already been approved. This action will make counseling services available soon to out-of-school youths, men returning from military service and others. Other proposals, such as the plan for maintaining nursery schools without federal aid, if necessary, will be acted upon as soon as advisable.

The great by-product of all this work is the more understanding relationship which has been built between members of the community and the public schools, an understanding based on a thorough review of the existing program in terms of the needs of the community of tomorrow. As a public relations venture this experience has proved its worth; in the improvement of educational opportunity in Ithaca, N. Y., this study of board of education problems by leading lay citizens will prove its worth in the postwar period immediately ahead.

Georgia Rallies to Improve Schools

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and

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GEORGIA is taking definite action to solve its immediate as well as its postwar problems. One of its concerns is the state's public school system. Machinery for planning was provided by the state legislature which in 1943 created the Agricultural and Industrial Development Board for the purpose of formulating plans and initiating programs affecting the economic, social and educational life of the state.

This board is composed of 21 members, selected on a nonpartisan basis. Its work is under the direction of a full-time executive secretary. The board is organized into seven panels of three members each, as follows: agriculture, industry, business and commerce, public works, government, health, education. Each panel has a paid director and staff.

Members of the several staffs have been chosen from the ranks of professional persons of the state or from among those familiar with the problems of Georgia. The plans recommended by each panel are subject to the approval of the entire board, after which appropriate legislative or other action will be taken to gain them further consideration and to put them into effect.

The education panel is composed of the state superintendent of schools, a former member of the state board of education and a prominent lay member. The panel staff is working closely with statewide committees of laymen and school officials on such problems as the program of the schools, administrative organization, financing, buildings, transportation, teacher education.

Last summer, workshops composed of teachers and administrators studied educational problems of the state, reporting their preliminary conclusions to statewide committees of school officials. These groups, in

turn, adopted recommendations and referred specific problems to the staff of the panel for intensive study. Active cooperation has been sought with the Georgia Education Association, the P.T.A., administrators' organizations and the public. Co-operative effort is especially important at this time because a new state constitution will be proposed and acted upon when the state legislature meets in January.

Members of the education panel and its technical staff believe that an improved educational program in Georgia will come as the result of the participation of the people in the undertaking rather than from any attempt of a few leaders to provide answers to the problems encountered. Twelve counties in the state were chosen on the basis of such criteria as: interest in educational problems; sympathetic and competent professional leadership; representative character of the population, industries and land-use areas. Field workers of the panel staff are organizing lay and professional groups in each county for the purpose of discovering what the people want their schools to do and to be and to obtain active support in attaining these ends. A year's study of the various problems is planned.

A "Leaders' Manual," developed by the field and technical staffs of the panel, is intended to serve as an outline of procedures in assisting lay and professional persons to do their own planning. However, it pointedly avoids presenting a blueprint of an educational program for any county or community.

Although the work is still in its beginning stages, field workers and the technical staff report active interest among laymen and professional people of their "experimental" counties, as well as a much greater alertness toward school problems than was supposed to exist.

SCHOOLHOUSE



PLANNING

View of the library in Clover Park High School near Tacoma, Wash., built to meet the needs of a school district which combines the characteristics of a boom area with those of a locality giving promise of a healthy future.

HOUSING AN AUDIO-VISUAL MATERIALS CENTER

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THE increased use of audio-visual aids in schools after the war calls for building local libraries of films, filmstrips, slides and the other sensory devices. What provision should a school system make for housing and equipping its center of objective curriculum material?

The activities of a well-rounded audio-visual program will include (1) the training of teachers in the use of each type of audio-visual device and in building classroom experiences in which films, pictures and radio contribute significantly to learning; (2) the selection of materials and the integrating of them into the curriculum; (3) providing schools with suitable projection space and equipment, such as opaque shades and convenient electric outlets, and (4) organizing administrative, clerical and mechanical services so as to ensure the provision of materials for the teacher when needed.

It Should Be a Place of Activity

All these activities have their focus in the department or center for audio-visual materials. The center should be not merely a collection of shelves and film cabinets but a place of stimulating activity and of varied resources for enriching the learning experiences of children.

This suggests that the center be equipped both as a storage depot and as a curriculum workshop. Thus its facilities would provide for the following services.

1. *Previewing films and evaluating other types of material.* Committees examining films for purchase should have a convenient, well-equipped place in which to work. Teachers should be encouraged to visit the center in order to make a firsthand selection of motion pictures, photographs, slides, filmstrips or exhibits for their activities.

2. *Storage of audio-visual materials.* These should include materials which belong in the permanent library of the school system and those which will be borrowed or rented from outside distributors.

3. *Distribution of materials to schools.* Prompt distribution of materials requisitioned for classroom use

is extremely important. Efficiency here depends not only upon skilled clerical assistance and adequate delivery service but also upon facilities for record keeping, repair of damaged items and ready location of materials in the storage rooms.

4. *Care and repair of materials.* Systematic inspection and repair are essential when materials come back to the library from the classrooms.

5. *Maintenance of records.* The records system in the central library of audio-visual material should be modeled after that of the book library. "Accession" data for each item, a card catalog file and records of use are required. While records should be simple, the fact that a school may start with a limited amount of material should not lead to neglect of systematic routine.

6. *Demonstration and conferences to improve use of materials.* Many kinds of supervisory assistance to teachers can be provided in the center, such as help in the selection of materials, in planning the experiences of which the aids will be a part, in sharing creative technics of other teachers. Conferences with the director and the materials librarian, group discussion and demonstration meetings should lead teachers to look upon the center as a treasure trove of instructional materials and a source of ideas.

7. *Production of material.* The small library will find it useful to have work space for mounting photographs and preparing slides. The larger libraries will provide darkroom facilities for building up local pictorial sets of educational value. In some systems, the center may acquire facilities for sound-recording and motion picture production, perhaps even a school broadcasting studio. Where a school system has established an F.M. broadcasting station, it requires little imagination to picture the future addition of a television picture transmitter for telecasting films from the central library.

The accompanying sketches sug-

gest ways in which provisions may be made for these centralized activities in school systems of different sizes.

Figure 1 shows an arrangement of space and equipment for a large school system. Here the board of education library has been combined with the audio-visual aids center. Some communities may prefer to integrate the center with the local curriculum bureau; others may choose to establish it as a separate activity. Whatever the form of organization, a trained librarian should be in charge of the materials and close cooperation with curriculum development should exist.

The catalog and reference room contains the stacks for the professional library, catalogs of films, filmstrips, slides, maps, recordings and current radio programs and a comprehensive card catalog for all audio-visual materials and books which the center distributes. Thus, teachers planning new units of work have at their command a wide variety of resources, with the materials librarian to advise them. Convenient reading tables facilitate the visitors' work.

Repair and Work Room Essential

The repair and work room is intended for rewinding, inspecting and mending films, for the production of slides, for the mounting of photographs and for all other minor repair and production work. There is a darkroom to facilitate general photographic production of local instructional material and of school activities for public relations work.

Adjacent to the repair workroom is the general storage room. It will be noted that steel cabinets have been suggested for films and filmstrips; files for glass slides, 2 by 2 inch slides, recordings and flat pictures; racks for maps and charts; bins for objects, specimens, models, dioramas and other exhibit material.

The small preview room is for teachers who wish to examine materials before selection. Various types of projectors should be available, as well as individual viewers for slides.

Adjacent is a small acoustically treated room which serves the same purpose for "listening" aids. Fea-

tured is the large table on which three individual turntables equipped with earphone sets are mounted. The turntables operate both at 78 r.p.m. and at 33 1/3 r.p.m.

The large projection room is an important part of the center. It will serve for the regular previews of new materials to which many teachers will be invited, for the preview of special materials at special times, for demonstration lessons with small groups of pupils, for conferences on the use of audio-visual materials and, if desired, as a studio in which motion pictures or recordings can be made. Acoustic treatment and a special ventilating unit are essential. Projectors and sound control equipment are housed in a booth to prevent noise interference.

The office of the director is equipped with a conference table.

Ample display cases are indicated for the corridor. Functional displays can show visiting teachers how the materials in the center may be combined for various classroom activities.

Small schools do not require the more elaborate arrangement described. However, they do need central organization. Figure 2 shows a suggested arrangement for an audio-visual aids center in a small school system. A classroom might be converted for this purpose; if possible it should be adjacent to the school library so that the storage and distribution of materials can be directed by the school librarian.

Most of the functions of an audio-visual center find expression in the facilities detailed for this room. There is a small charging desk for the materials librarian; a bulletin board for announcing new acquisitions;

stacks, cabinets and shelving for the storage of materials. A rewind bench and a general workbench are provided.

A special feature is the arrangement made for the projection of audio-visual materials. Curtains create a small inside room which will seat approximately 20 persons. The mounted screen, movable chairs, conference table and projector stand facilitate the work of previewing. Provision should be made for acoustical treatment and ventilation.

The use of audio-visual materials can be placed on an organized basis no matter how large or how small the school system. Efficient organization does not depend upon specialists and large libraries; it develops from careful planning of policies, procedures and personnel in terms of local needs and facilities.

Plans for Audio-Visual Materials Centers: (left) in a large school system; (right) in a small school system. Alfred Hopkins & Associates, Architects.

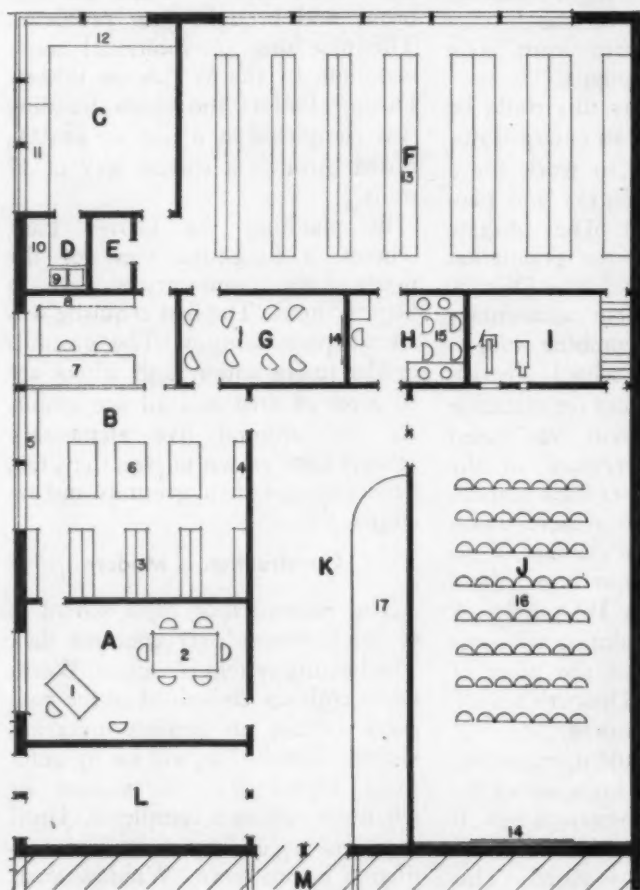


Figure 1

Rooms

- A. Director's office and conference room
- B. Catalog and reference library
- C. Repair and work room
- D. Darkroom
- E. Equipment storage room

- F. Storage stack room
- G. Small preview room
- H. Listening room
- I. Projection and control booth
- J. Projection room
- K. Corridor
- L. Vestibule
- M. Existing school building

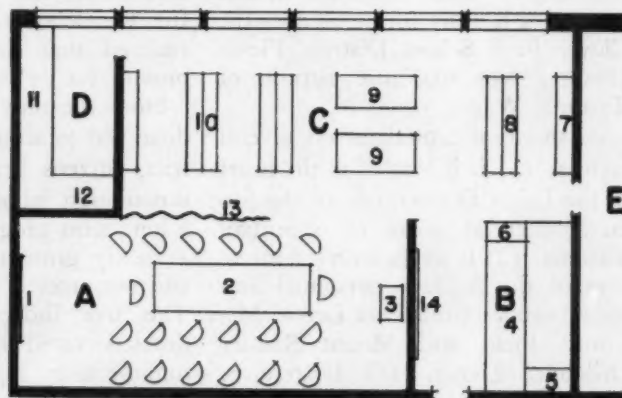


Figure 2

Space Allocation

- A. Projection and conference space
- B. Librarian's space
- C. Storage and display space
- D. Work space
- E. School library

Equipment

- 1. Screens
- 2. Conference table
- 3. Projector stand

- 4. Charge-out desk
- 5. Charge-out file
- 6. Card index file
- 7. Catalog rack
- 8. Picture file
- 9. Reference tables
- 10. Cabinets for films and filmstrips; files for glass slides, 2" x 2" slides, recordings
- 11. Rewind bench
- 12. Work bench
- 13. Curtain
- 14. Bulletin board

Equipment

- 1. Desk
- 2. Conference table
- 3. Reference book shelves
- 4. Catalog rack
- 5. Card index files
- 6. Display tables
- 7. Materials librarian's desk
- 8. Librarian's file
- 9. Developing tank
- 10. Work bench

- 11. Rewind bench
- 12. Work bench
- 13. Steel cabinets for films and filmstrips; files for glass slides, 2" x 2" slides, pictures, recordings; shelving for objects, specimens, models, exhibits
- 14. Screen and blackboard
- 15. Mounted turntables with ear phones
- 16. Movable seats



Clover Park Junior-Senior High School in suburban Tacoma is thoroughly modern in its construction and its program.

FEW school districts combine as thoroughly the characteristics of a boom area with those features of natural growth and development that promise a healthy future as does the Clover Park School District, Pierce County, No. 400, just outside of Tacoma, Wash.

Its situation capitalizes on several factors: (1) It is located in the heart of the Lakes District, one of the finest residential areas of suburban Tacoma. (2) It serves both the members of the military personnel and their families from Fort Lewis, McChord Field and Mount Rainier Ordnance Depot. (3) It receives many junior-senior high school pupils from families of employees of near-by American Lake Veterans' Hospital and Western Washington State Hospital. (4) The main educational plant is as nearly in the geographical center of the district as possible. Roads and transportation facilities are good. Nine buses serve pupils who live beyond walking distance. (5) It serves one federal housing project, the American Lake South Gardens. (6) Its nearness to Tacoma gives it the benefit of a metropolitan location, yet it is isolated enough to avoid the distractions of a city location and it has space to grow.

The story of the Clover Park schools goes back to 1922 when there were five small, independent elementary school districts, each with one or two teachers, and grades from 1 through 8. Pupils who wanted to continue their education had to go

into Tacoma. This involved transportation, and the resulting coordination of school programs and pupil adjustment was not highly successful. Residents of the various districts realized that the area must soon provide for its own pupils.

Since the only way this could be done was to acquire an enlarged district, citizens began to work for a union high school district and plan a long-term program. They foresaw a steady growth in the population and resources of the Lakes District. The five independent elementary districts voted to combine into a junior-senior high school district. The state law regarding organization of junior high schools was based largely on the experience in the formation of the Clover Park schools. It took four years to achieve union and construct the first element of the new plant. The junior high school opened in 1928 with 110 pupils. A vigorous young schoolman, who was sold on the vision of the place of service of the Lakes District's school, became its superintendent.

The depression made it impossible to begin adding the high school department as soon as contemplated. It was not until January 1938 that the tenth grade unit was added. This cost \$201,701.19. The district voted 25 mills for this purpose.

The second addition for the eleventh grade was put into use in September 1938. The upper floor was finished at a cost of \$23,429.87. This was financed with a tax levy of 25 mills and a bond issue of \$77,000. In

1939 a tax levy of 20 mills and, in 1940, one of 18 mills took care of those developments.

The third addition was put into operation in April 1941 at a cost of \$144,047.04. This time the state granted \$39,719 and the remainder was raised locally. Then the war broke and brought new problems. The first unit of vocational shops was built by the W.P.A. in 1939-40. During 1941-42 the shops building was completed at a cost of \$56,000, raised through a special levy of 17 mills.

In planning the Clover Park schools, a long-time view of the needs of the community was always kept in mind. The first requisite was an adequate campus. The grounds of the junior-senior high school are 30 acres in area and all are usable. As the original five elementary schools have grown in size, they, too, have enlarged their grounds and facilities.

Construction Is Modern

The junior-senior high school is of brick veneer over concrete slab. The heating system is unique. Warm water coils are embedded in the wall slabs so that no heating units are visible. Ventilation will be by automatic forced draft of washed air when the system is completed. Until then, gravity and open-window ventilation has to serve. Window areas and lighting equipment conform to the best and most modern ideas. Artificial light is of the best vapor type and standard type fixtures are placed so that the visibility is even better than that afforded by daylight. Since the schools are planned to carry an extensive evening program, this

A Modern

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Community Educational Service Center *adapts its program to local needs*

is a most desirable feature. Eventually, tubes of the vapor type will be installed.

Other features of the physical plant are: the cafeteria-kitchen layout, which includes a special ice cream and snack bar and office for the dietitian-manager; the library, which is intimately connected with the study hall; separate gymnasiums for boys and girls; the household arts rooms; the music room, with separate practice cubicles and instrument closets; the science laboratories, with greenhouse, darkrooms and paraphernalia for lecture-demonstration and experimental work in elementary science; the offices for student activities; the health center; the vocational shops.

Final plans call for a large auditorium as soon as possible. Folding bleacher seats in the gymnasium also will be installed later.

Conceived as a community educational service center, the Clover Park schools have faced some stiff problems caused by the depression and the war with their shifts in population, industry and training needs.

The basic population of the area consists of families that live in better-than-average homes. Families of offi-



Kitchens (top) have all modern equipment.

The music room (center) has a small stage at one end and storage space for every type of musical instrument. Acoustical tile is effectively used for the walls. Lights are fluorescent. Adjoining the music room are four soundproof practice rooms and an office for the instructor.

The cafeteria (left) has a modern ice-cream bar. Table surfaces are of plastics.

cers attached to the neighboring posts make up another large element. The children of these groups require a strong academic program leading to college and university study.

Because of the proximity of the military and other public institutions, there have come into the district many temporary residents, families of general service men, construction employes, maintenance people and an overflow of the industrial population of Tacoma. Their children represent a less stable population, need a more vocational and practical arts type of training and do not generally expect to continue their education beyond high school.

Elementary Schools Enlarged

To care for this rapidly expanding enrollment, additions and improvements have been made to the original five small elementary schools as well as the junior-senior high school. Some now have kindergartens and there is one nursery school with 36 children enrolled. The district also provides supervision and facilities for a program for children before and after school hours on week days and Saturdays.

Another group served by the schools of the district consists of the adult personnel of the near-by military posts. When the Army first began to expand, many boys found themselves in the Army without having been graduated from high school. Hundreds were stationed at Fort Lewis and McChord Field. Through night classes at Clover Park High School, many finished their high school subjects.

Another group consisted of men who couldn't read or write. In cooperation with the Army, Clover Park High School gave them the rudiments of an education, being among the first schools to do something along this line.

Others needed vocational training, such as typing and shorthand, motor mechanics, radio instruction, photography and welding. This training was provided. When the Mount Rainier Ordnance Depot needed trained women mechanics and technicians, the school again provided staff and facilities and aided in the development of the training program at that base.

Then the special services division of the Army called for help. It wanted a staff to assist in orienting

the Army personnel in the causes, backgrounds and reasons for the war and in the war and peace aims of the United Nations. Clover Park recruited lecturing talent and now supervises the activities.

Another Army project that needed assistance was the Hobby House at Fort Lewis. Teachers, artists, craftsmen and hobbyists of all kinds began to direct soldiers in the execution of their creative efforts. The Hobby House provides an outlet for leisure-time activity and is of great value. The staff is on the pay roll of the Clover Park schools.

At present the school is training women as airplane mechanics and ground crews for the neighboring air fields. Other students are being developed as machinists, welders and instrument assemblers. Classes are at work throughout the day and far into the night.

Cooperates With Penitentiary

Another type of educational institution, McNeill Island Federal Penitentiary, called for help to give vocational training to men who were soon to be released from prison or who were eligible for certain privileges. Clover Park undertook classes in welding, ship carpentry, machine shop, sheet metal work and truck mechanics.

A unit of the Civil Air Patrol was recently assigned to the district and pupils are taking courses under it as part of their pre-induction training. They get basic airplane construction and mechanics, meteorology, radio, first aid, military drill and calisthenics. It is planned to develop a landing strip on the school property as soon as possible. One half of the vocational building is of hangar type, which permits work to be done on at least two fuselages and several engines on racks at the same time.

This promises to be one of the most fruitful fields of service of this community center, for the Pacific Northwest is definitely air-minded and Clover Park lies under the wings of neighboring private and military air fields.

Under the direction of the principal of the junior-senior high school, every pupil is assigned to some faculty member for guidance. The most interesting features of this program are:

1. Health. A full-time nurse is on duty during the day. The health

center has well-equipped facilities for first aid and examination and hospital beds for pupils who become ill in school. Girls' and boys' sections are separate. Children are checked by the teachers in the morning and suspicious cases are referred to the health center. Pupils returning to school after an absence of more than two days must clear through that office.

2. Guidance Data. A cumulative personnel folder is maintained for each pupil. This includes a personnel chart and summaries of all the pertinent facts concerning the individual. Use of the folder is under the direct supervision of the principal.

3. Pre-Entrance Guidance. A vigorous effort is made to give preliminary guidance to each pupil prior to admission. Each of the contributing elementary schools is visited and a definite orientation program is carried out. Every pupil is given an orientation bulletin containing facts concerning the high school organization, program and requirements.

4. Sports. Intramural sports and physical education are stressed rather than competitive interschool athletics. Health is a required subject for all pupils. Excellent facilities and equipment are available for both boys and girls and more can be added later.

Teachers Are Kept Busy

With such a varied and changeable program, it would almost be a super-superintendent who would know just who was doing what at the moment. At the present time about 127 members comprise the staff of the Clover Park School District. They are almost equally distributed among the elementary schools, the junior-senior high school, the adult vocational program and the orientation-Hobby House work in cooperation with the military posts.

More than 1900 children and young people are living within the influence of the Clover Park schools. Consistent promotion and planning on the part of residents of the Lakes District, who are thoroughly convinced of the stable character of the community, coupled with the effort and energy of a vigorous local board of education and the skill of the administrative and teaching staffs, have established a thoroughly wholesome educational program.

Architects and Schoolmen Want Latest Type Mechanical Equipment *after the war*

ONE of the distinctive differences in postwar school buildings will be the more extensive use of fluorescent lighting. According to the returns of the survey made by The NATION'S SCHOOLS among 6300 school systems of 500 enrollment and over to determine the type of postwar products now contemplated, 71 per cent of the schoolmen who replied will use fluorescent lighting as compared with 51 per cent who will use incandescent.

This adds up to more than 100 per cent but is due to the fact that some schools will use one type in certain departments and the alternate type in other departments. This is probably the most logical answer to the problem of lighting as each type has certain advantages. It is somewhat surprising, however, to find that architects are less impressed by fluorescent lighting than the superintendents as only 52 per cent indicate an intention of using any fluorescent while 74 per cent favor incandescent.

Semi-Indirect Fixtures Preferred

When incandescent lighting is to be used, it will be employed in a somewhat different fashion from that used formerly, for the indirect and semi-indirect fixtures are each accorded preference by 40 per cent of the schoolmen while the standard enclosed globe type receives the remaining 20 per cent of the votes. As the indirect and semi-indirect fixtures give greater light diffusion and less glare than the ordinary enclosed globe design, these preferences are in keeping with the recommendations of the best authorities on school lighting. An appreciation of the need for keeping the direct light source out of the field of view is also apparent in the fact that schoolmen have favored by 3 to 1 covered fluorescent lamps over exposed lamps. The architects concur.

Most of those interested in fluorescent lighting would like to have the equipment mounted at the ceiling level or recessed therein. About half as many, or 30 per cent of all,

favor the pendant type of fluorescent fixture while the remaining 11 to 12 per cent are interested in a coved installation on the sidewalls near the ceiling. There is something to be said for all these methods of installation and as yet there has not been a sufficient accumulation of experience in schools to make any one of them an obvious choice over the others. New developments are still being made.

As most schoolmen and architects know, there has been on the market for several years an electric eye device which automatically switches the artificial light off and on whenever the foot-candles of natural light rise or fall below a certain predetermined level. This apparently has some definite appeal to the schoolmen for 70 per cent of them indicate that they consider it desirable equipment.

With schools being used more and more as community centers, it is not surprising to find that 25 per cent of the schoolmen and 36 per cent of the architects feel it is desirable to provide an emergency or stand-by lighting plant for the auditorium. Almost as many—20 per cent of the schoolmen and 26 per cent of the architects—consider it desirable for the gymnasiums and only a slightly smaller number would like to have such emergency service for the corridors. In some states this is required by the school building code under certain circumstances. It is a safety precaution that should at least be considered by all schools having auditorium and gymnasium seating capacities of 200 or more.

Comparatively few existing schools were provided with enough electric base plug outlets when originally built. This has been a deterrent to a more widespread use of the many mechanical audio-visual aids, such as still projectors, motion picture projectors, recorders, radios and record players, that will occupy an increasingly important place in postwar education.

The newer schools, however, are going to provide them, with 90 per cent of the superintendents planning

J. W. CANNON JR.

to have two or more such outlets in each classroom. A fairly recent development has been a continuous base outlet so that the plug of any electrically operated appliance can be hooked in anywhere along the base. A majority is interested in this.

Another rather recent development is the germicidal lamp for the elimination of air-borne bacteria. There still seems to be some question about the efficacy of such installations in areas as large as classrooms but 46 per cent of school administrators and 36 per cent of the architects are considering the use of them in toilet rooms. That they might be effectively used in locker rooms, infirmaries and clinics is evidenced by the fact that 39 per cent of the schoolmen believe they could be used in the first named location, 19 per cent in the second and 20 per cent in the third.

Want Communication System

It is also evident from the survey that most of our postwar schools will install centralized sound systems. With loud-speakers located in the classrooms and with a control panel in the principal's office, such a device can be used to make announcements of general interest either to the student body or to a selected speaker outlet for any one classroom or a combination of several. This is a service that 60 per cent of the superintendents and 67 per cent of the architects contemplate installing.

To reverse the system is also possible, thus enabling the principal to listen in on the activity of a particular class. This is a feature desired by practically all the school administrators who are planning to install a centralized sound system. In addition to the announcing and talk back features of such systems, a radio pick-up and a record playing feature are frequently incorporated, and according to the survey results almost all superintendents want these included. Apparently a feeling exists

that in addition to the centralized system there is need for the more direct and private type of communication afforded by a telephone system between rooms, for 57 per cent of the schools answer this question in the affirmative against 43 per cent in the negative. Architects, however, favor it by 2 to 1. Of the various types of private telephone systems 40 per cent of the schoolmen feel that the common talking type will serve their purposes, 24 per cent vote for a switchboard control and 36 per cent for an automatic exchange. The architects show no particular preference, approximately one third voting for each of the three.

How extensively television can be used in postwar education it is still too early to know but the possibilities are intriguing. The U. S. Office of Education is already working with various state departments of education helping them analyze the geographical and topographical features of their states in an effort to determine the number and location of television broadcasting stations necessary to achieve coverage of all schools in the area.




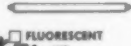
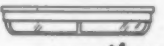



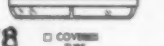









As television may be a highly important educational tool of the future, it seems advisable that schools consider what provisions can be made for it in the original construction, thus saving the expense of installing it after the building is completed. It is interesting to note that in answer to the question, "Do you contemplate wiring for the eventual use of television?" 49 per cent of the superintendents answer "Yes." Architects give a proportionate answer, 47 per cent for and 53 per cent against.

The master program clock system will be used almost to the exclusion of the individual program clock according to the survey results, for 96 per cent vote for the former as against 4 per cent for the latter. Most schoolmen want such a program clock to operate corridor bells (66 per cent), classroom buzzers (60 per cent) and outdoor signals (64 per cent).

A fire alarm system is also thought to be essential with 70 per cent of the school administrators preferring it to a manual alarm. Of those who indicate that they would

use a fire alarm system, 58 per cent favor the noncoded against 42 per cent for the coded type, while the architects are almost evenly divided on their choice of these two types. Of the three types of fire extinguishing apparatus on which the survey sought information 50 per cent of the schoolmen favor portable extinguishers, 32 per cent, hose cabinets and 18 per cent, sprinkler systems. The architects show a slight preference for hose cabinets over portable extinguishers, 47 per cent to 43 per cent, with the remaining 10 per cent of the choices recorded for automatic sprinkler systems.

It is evident from this portion of the survey that school administrators and architects are conscious of the many possibilities for improvement existing in modern mechanical equipment for the school building and that they intend to make wide use of it in the buildings they are now planning. What they think about other mechanical features such as plumbing, heating, air conditioning will be the subject of the sixth and last article in this series, which will appear in the January number.

<h3>LIGHTING</h3> <p>How many foot-candles (or deks) do you consider adequate?</p> <div style="display: flex; justify-content: space-around;"> <div>  <p>INCANDESCENT 51-74</p> </div> <div>  <p>40-40 INDIRECT 24 40-40 SEMI-INDIRECT 47</p> </div> <div>  <p>ENCLOSED GLOBE 20-29</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div>  <p>FLUORESCENT 71-52</p> </div> <div>  <p>Ceiling 16-17 FLUSH CEILING 42-41</p> </div> <div>  <p>PENDANT 30-51</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div>  <p>Cove 12-11</p> </div> <div>  <p>EXPOSED TUBE 22-27</p> </div> <div>  <p>CONTINUOUS TUBE 78-73</p> </div> </div> <p>DO YOU CONSIDER IT DESIRABLE TO PROVIDE EMERGENCY OR STANDBY LIGHTING PLANT FOR</p> <p>25-36 AUDITORIUM 20-26 GYMNASIUM 16-26 CORRIDORS 3-5 OTHER (Specify) _____</p>	<h3>COMMUNICATION</h3> <p>Do you contemplate installing a communication system incorporating facilities for</p> <p>60-58-54 ANNOUNCING 67 62-62 TALK BACK (listening to Classroom) 67 67-67 RADIO BROADCAST 67 67-67 RECORD PLAYING 67</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <h4>TELEPHONE</h4> <p>Do you contemplate later communication telephone?</p> <p>57-68 YES 43-32 NO 40-24 COMMON TALKING 35 36 SWITCHBOARD 35 AUTOMATIC 30</p> </div> </div> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <h4>TELEVISION</h4> <p>Do you contemplate wiring for eventual use of television?</p> <p>49-47 YES 51-53 NO</p> </div> </div>
<h3>OUTLETS</h3> <p>BASE PLUGS (Classroom)</p> <p>ONE TWO THREE MORE</p> <p>10-13 49-55 31-25 10-7</p> <p>CONTINUOUS BASE OUTLET</p> <p>This type of baseboard permits plugging in of electrical lights or appliances at any place along walls. Would you like to have this in classrooms or other rooms?</p> <p>54-50 YES 46-70 NO 48-34 ONE WALL TWO WALLS 33-40 16-15 THREE WALLS FOUR WALLS 10-13</p> <h3>CONTROL</h3> <p>Do you consider it desirable to have general or special lighting switched on and off at predetermined foot-candle levels by an electric eye?</p> <p>YES NO</p> <p>70-52 30-48</p> <h3>GERMICIDAL LAMPS</h3> <p>Many hospitals and public restrooms have installed ultraviolet germicidal lamps to eliminate air-borne bacteria. Is this a feature you would be likely to consider installing in new schoolhouses?</p> <p>39-26 LOCKER ROOMS 19-32 46-36 TOILET ROOMS 20-32 INTERMEDIATE CLINICS</p>	<h3>PROGRAM CLOCK</h3> <div style="display: flex; justify-content: space-around;"> <div>  <p>INDIVIDUAL 4-11</p> </div> <div>  <p>MASTER PROGRAM CLOCK SYSTEM 96-66-60-64 CORRIDOR BELLS 79 CLASSROOM BELLERS 64 OUTDOOR SIGNALS 70</p> </div> </div> <h3>FIRE PROTECTION</h3> <div style="display: flex; justify-content: space-around;"> <div>  <p>MANUAL ALARM 30-27</p> </div> <div>  <p>FIRE ALARM SYSTEM 70-73 NON-CODED 48-49 CODED 42-51</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div>  <p>SPRINKLER SYSTEM 10</p> </div> <div>  <p>PORTABLE EXTINGUISHER 43</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div>  <p>FIRE HOSE CABINETS 47</p> </div> <div> <p>18-50-32</p> </div> </div>

Heavy black figures indicate superintendents' choices. Light figures indicate architects' choices. All figures represent percentages of the total replies received.

Let Schools Foster *International Friendship*

FLETCHER PEACOCK

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Fredericton, N. B.

AFTER victory crowns the efforts of the Allies, what may we expect? Will the 37 United Nations now working together effectively to beat off the enemy continue to co-operate on the basis of mutual understanding and thus win a lasting peace? Or will each nation retire within its own borders to foster a purely national interest and ideology without any thought or knowledge of its neighbors as was done after the armistice of 1918?

Upon the answers to the foregoing questions will depend the happiness and fate of countless millions in succeeding generations.

★ **Peace Conferences Alone Have Failed.** In this hour of world crisis the thing most wanted by humanity is enduring peace. To obtain this, thoughtful Allied leaders are proposing, planning, conferring and striving. International committees, conferences and leagues, both political and economic, are meeting almost continuously at Bretton Woods, Dumbarton Oaks and elsewhere, trying to find some method of avoiding the dangers inherent in the imminent world situation and to exploit every opportunity to organize for peace.

These efforts are right and praiseworthy but history teaches us that they alone will not produce permanent world amity. There were active peace endowments, Hague tribunals, Geneva conventions, Genoa conferences and a League of Nations all working overtime during the last twenty-five years but they failed to avert war.

★ **Total Peace Through Cooperation of Nations' Schools.** Some influence or technic must be added to

the academic talks of national leaders if the future is to be made secure. It may well be that peace efforts of the past have failed for lack of adequate knowledge and understanding on the part of the masses of each nation with respect to other countries which could be developed through the international cooperation of educators. We have come to know what total war means and that it has been attained partly, at least, by applying the forces of education both with respect to ideologies and through the whole range of knowledges and skills involved in modern warfare. The schools and colleges have made tremendous contributions to *total war*. Let us have the concept of *total peace* to the attainment of which the vast influence of the peoples' schools in all the nations shall be dedicated.

★ **Not a Common Ideology but a Common Freedom.** This would not mean that any United Nation would have to abandon its ideology or teach that of its neighbor. It means only that each would make sure that its rising generation had a knowledge of, and respect and appreciation for, the traditions and ways of its neighbors in order that all may enjoy freedom to live and develop in a community of free nations. This presents a mighty challenge to teachers and educational leaders in the United Nations of this and succeeding generations.

★ **The United States-Canada Plan.** As a practical beginning, the Canada-United States Committee on Education has lately been formed under the joint auspices of the American Council on Education and the Canada-Newfoundland Education

Association. This is an unofficial nongovernmental organization of educators which will seek to perpetuate and strengthen the present good relations between the two countries through cooperation among the schools and colleges of each.

Among other activities to be undertaken, a survey will be made of the general field of social studies by a joint committee of experts to discover what the pupils of each country are being taught about the other. The findings will be made available for the use of all educational authorities concerned.

It is felt that the best basis for mutual understanding and respect is a broad factual background and that the children of both countries should, as far as possible, read the same stories (the true ones) about the geography and history of the two nations, including those about such matters as the Revolutionary War, the War of 1812, boundary questions and fisheries disputes. Unless these and such current topics as lend-lease, mutual aid, the Alaska Highway and airports are presented in the schools of both nations fairly and in the spirit of good neighbors, misunderstandings may easily arise.

The joint committee also proposes to have studies made of films and other visual aids materials that may be used by the schools in the interpretation of one nation to the other. Special summer schools for teachers with workshops and seminars on the United States and Canada will be arranged with comprehensive plans for teacher exchanges and widespread pupil correspondence across the border.

★ **General International School Cooperation.** The Canada-United States Committee's objectives and methods have been well received by the press and leaders of both countries. It may be that this plan of forming international educational committees to foster good understanding and mutual respect will appeal to other countries.

Already there has been a proposal that such a bilateral United States-British committee be established. Should such joint committees become general among the United Nations, the peoples' schools in these countries may well become the most potent of all agencies working for enduring world peace.

Share Your Experience

RECENTLY I heard an educator state that his school had been called upon to carry out some portion of an educational activity for 97 different local, state or national organizations since late last spring. He voiced great fears as to how much time was left to teach the three R's.

Such a dilemma certainly creates problems that make many of us feel like shunning new suggestions or ideas whereby teachers could expand their contributions to human welfare. There is, perhaps, a need for someone to work out a few criteria which will be helpful in judging how much of their busy programs our schools should apportion for the promotion of other groups' interests.

Institutionalized education must be constantly on the alert to ascertain avenues whereby it may render a more genuine service in the mental development of mankind. Tragically enough, some of our utopian goals may have to be refocused considerably toward mental rehabilitation rather than toward mental development. We may have to alter our perspective and change many of our

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beliefs. Thus, we should more eagerly think through any logical suggestions which might help us strengthen our efforts for a greater service in the future.

Many big items of future planning require the time, skill and efforts of many leaders to develop but let us not forget some of the smaller items for they, too, have a part to play. The simple little contributions or ideas which might be unique in the philosophy or thinking of one classroom teacher might well be molded into the general design of educational activity. This, multiplied by thousands of teachers, would build up a reservoir from which might flow eternally a stream of constructive thought to be sampled by the expert and amateur alike.

Undoubtedly, many of these sparks of mental thinking are released in conventions, group meetings and the like but that still doesn't tap the unlimited reservoir of visions and

ideas that must exist in the minds of teachers who are trying new things, thinking new thoughts, facing new problems and accepting new challenges every day. We need to stimulate these people into letting us go backstage with them in their thoughts. We need to have them take our imaginations for a little stroll with them for a panoramic view of some of the things they are doing and pondering.

More teachers should get the habit of contributing to current periodical literature. They should share with others the little techniques which they are finding successful and of interest. They should get stimulating ideas or suggestions into print.

Teachers, in general, are modest about making public their innovations and improvements, but each would be the gainer if he would take careful inventory of his "bag of tricks" to see if he might have something to contribute to others. An inevitable good result of such sharing would be a conscious effort on the part of most of us to develop something new and worthwhile to pass on to others.

Contribute to Magazines

Our magazines are doing a fine job of printing practical and interesting articles. But if increased vitalization was possible through numerous contributions of little ideas from more teachers, we would await each issue with greater eagerness. Teachers would seek educational literature much as children run for the comic strips.

It is not unlikely that teachers might find current literature so beneficial that they would be stimulated to browse deeply into the bound volumes of periodicals for recent years. This might lead to the development of constructive ideas based on suggestions submitted in the past.

Let us explore all possibilities for making our educational literature serve us to the fullest extent while we, as participants and contributors, serve the needs of our educational literature.

WRITE FOR YOUR VOLUME INDEX

If you bind your volumes of *The NATION's SCHOOLS* you will want the index to Volume 34, covering issues from July through December 1944. War-time paper rationing prevents its publication in the magazine. Send requests to 919 N. Michigan, Chicago 11, Ill.

The School District Problem Has Long Roots

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Federal Security Agency

IT WOULD be difficult to find a problem of governmental organization which has agitated the American people so continuously as the school district organization. A vital and burning issue in Colonial times, it still remains one today.

That it continues to keep the public interest is perhaps due to the fact that the school district is probably the governmental unit closest to the people; there are some 120,000 separate districts. And while there has been, from time to time, a movement to reorganize and consolidate small school districts into larger and more effective instrumentalities of school operation, the school district system still is a basic form of school administration and government in the United States.

Apart from governmental theories of keeping the administration of schools close to the people, the present system is nurtured by all sorts of important vested interests. Some stem from financial reasons, such as taxation, while others grow out of personal motives, convenience, authority and preferences and other such reasons. There always have been efforts to transfer territory from one district to another, to dissolve districts and create new ones, to consolidate districts. Many such efforts end up in the courts. A brief review of some of these cases in the year just ending is illuminating.

School District as State Instrumentality. Nowhere is it more clearly shown than in the legal status of local school districts that education is a state function. A recent New York case illustrates the universal rule of law that the local school district is purely a creature of the state, completely subject to its control

within state constitutional limitations.

A local board of education sought to compel the state commissioner of education to apportion transportation state aid on the basis of the law existing at the time of its consolidation, which provided a transportation quota of one half the expenditure for transportation. Subsequently, the law was placed on a formula basis, which reduced the plaintiff school district's allotment from \$5000 to nothing. The basis of the suit was a charge that the change of law was unconstitutional in that it violated the federal constitutional protection against abrogation of contracts. The court held against the school district:

The maintenance of common schools is a political function and is, primarily, the concern of the state. . . . The legislature in performing this function forms school districts which are political divisions and agencies of the state for more effectively carrying out its local educational program. These school districts are municipal corporations.¹

The court then went on to cite from an opinion of the Supreme Court of the United States:

"The number, nature and duration of the powers conferred upon these [school or municipal] corporations and the territory over which they shall be exercised rests in the absolute discretion of the state. . . . The state, therefore, at its pleasure may modify or withdraw all such powers, may take without compensation such property, hold it itself, or vest it in other agencies, expand or contract the territorial area, unite the whole or part of it with another municipality, repeal the charter and destroy the corporation. All this may be done, conditionally or uncondi-

tionally, with or without the consent of the citizens or even against their protests. In all respects the state is supreme [subject to its own state constitution]."

An example of the operation of this basic principle of school district organization is a suit to contest the action of an Oklahoma county superintendent in transferring territory from one district to another. The objection was made that none of those signing the petition for the transfer was a property owner in the district being divested of the territory. The court held that the statute required only that they be "qualified electors" of the district and not that they be taxpaying electors or property owners.²

Curative Statutes. A Texas case illustrates another form of state legislative power over school districts, the curative statute, through which school districts which have not achieved clear legal status because of some fault, error, irregularity or even lack of authority in their organization may be validated by subsequent legislation.

Two districts had presented petitions for a consolidation election. The electors of Morgan district voted 17-16 against, and those of Wilson district 143-3 for, consolidation. The county board ordered consolidation, but it was agreed that the grammar school would not be removed from the Morgan district without the consent of its electors.

Although no such vote had been taken, no such school had been operated for five years. The district board wanted to sell some unused property, not including the old schoolhouse, situated in the old Morgan district, and suit was brought to enjoin such sale. The court upheld the sale and dismissed claims attacking the legality of the consolidation by stating that the annexation had been validated by the state legislature in general law.³

²Berryman et al. v. Howell, 149 Pac. (2) 505 (Okla., 6/6/44).

³Weaver v. Board of Trustees of Wilson Indep. Sch. Dist., 182 S. W. (2) 140 (Tex. Civ. App., 6/19/44).

¹Board of Education of Somers v. Stoddard, 49 N. Y. Supp. (2) 38 (N. Y. Sup. Ct., Albany County, 4/14/44).

However, it is important to note the scope of curative acts. An attempt to create a school district in Illinois apparently violated any statutory requirements, including the failure to post notices of election and failure to show that the proposed district had a population of 1500 persons and an assessed valuation of \$1,000,000. The district defended its legality on the basis of a curative statute which required an election but the court noted that an election meant a legal election and an election could not be legal without notice.

The various other statutory lapses in the district organization concerned legislative requirements which could be waived by the legislature in a curative act but the requirement of a (legal) election was not waived in this curative act. Consequently, since a valid election was essential to the operation of this curative act, although all the other failures were cured by the act, it is to be noted that the district still has no legal status.⁴

Statutory Requirements. Since a school district is a creature of statute, under ordinary circumstances the legality of its existence is dependent upon compliance with the requirements of such enabling legislation. Under Illinois law the state superintendent was required to submit a report on petitions for the creation of community high schools. This report, which was to be published, was to cover five items, including the estimated results of operating such a high school "in terms of local tax rates" and the nature and probable cost of alternative methods of providing adequate high school educational opportunities for the children who lived in the proposed district.

Where a report had failed to discuss these two items, the court ruled that the district had not been legally created. The statutory requirement was mandatory; its purpose was to furnish the voters with impartial and reliable information. Since "the furnishing of such information to the voters is the essence of the act," full and not merely substantial compliance was necessary.⁵

⁴People ex rel. Reich v. McCoy, 56 N. E. (2) 393 (Ill., 9/18/44).

⁵People ex rel. Shriver v. Frazier, 386 Ill. 620, 55 N. E. (2) 159 (1944).

An Arizona case also indicates the particularity with which courts sometimes look at such questions. A railroad sued to recover taxes collected for a union high school district. This district had been enlarged by addition of the territory of a common school district. Subsequently, the common school district enlarged its boundaries by annexing the railroad's property.

The court held the tax improper, since the statute did not provide that the annexation of territory to a common school district within an already existing high school district automatically included the annexed territory within the high school district. In such instances, the regular procedure established by statute for annexing territory to high school districts must be followed.⁶

Property Rights. When a district is dissolved, or part or all of it annexed to another, what becomes of the debts and the taxes of the old district? A characteristic answer as to the power of the legislature makes its appearance in the following Oklahoma case.

A dispute arose between two districts which, between them, took over all of a former intervening district. The plaintiff district claimed 45 per cent of the taxes levied by the absorbed district on the ground that it took over 45 per cent of its territory but the defendant district claimed all of the taxes. The plaintiff district took over its part first and apparently without any agreement of partition with the defendant. The law provided that the successor district should get all the property and assets and assume all the debts. The court held for the defendant district.

At the time of the earlier partial annexation to the plaintiff, it could not get any assets or property and its rights were fixed at the time of that transaction. The subsequent annexation of the remainder to the defendant was a separate action and under the law it was entitled to all of the assets and property. Nor did it make any difference that the two transactions followed each other closely because another statute relating to cases where a district was wholly divided by agreement was

⁶Maricopa County v. Southern Pac. Co., 148 Pac. (2) 824 (Ariz. 5/1/44).

inapplicable to the facts of this situation.⁷

Abandonment of District. A Colorado statute authorized the county superintendent to declare a district "unorganized" and annex it to an adjoining district if school "has not been maintained" in such district for three successive years. In this instance, two districts had operated no school in their territory for over three years but had arranged with a third district to send their pupils there and provided transportation for them.

The court set aside the action of the county superintendent in holding the districts "unorganized." They had not failed to maintain schools; it was an irregular, not a void, procedure and any complaining parent could have required the schools to be held within the district territorial limits. There was no abandonment of the school district.⁸

Authority of County Superintendent. Because of the technical nature of the problem, legislatures do not normally undertake directly to consolidate or reform school districts. It has been almost universally ruled that legislatures may delegate to administrative officials power to form and reform school districts.

A recent example is an Illinois suit challenging the constitutionality of a delegation of power to county superintendents to determine when a proposed transfer would be "more reasonably located as to comfort and convenience of the high school pupils of the territory . . ." and also attacking the validity of a delegation to county superintendents to determine whether the property in question was "compact, contiguous and adjacent to the high school district."

The court sustained the constitutionality of the school districting law. The statute was sufficiently clear to avoid being unconstitutional; the determinations of reasonable location, compactness, contiguity and adjacentness were finding of fact and did not cause the county superintendent to usurp legislative powers.⁹

⁷Cooperton Consol. Sch. Dist. v. Roosevelt Con. Sch. Dist., 147 Pac. (2) 447 (Okla., 3/28/44).

⁸Sch. Dist. No. 26, Gunnison County v. Hards, 149 Pac. (2) 651 (Col. 4/24/44).

⁹Husser v. Fouth, 386 Ill. 188, 53 N. E. (2) 949 (1944).

EDUCATIONAL PROGRAM Helps Social Offenders—*High School Cooperates With Penal Institution*

MODERN penal institutions, under humanitarian administration, recognize the fact that they have a larger social responsibility than one of mere punishment of wrongdoers. They recognize their correctional function also and are concerned with the education and training of their charges beyond their pre-institution status, so that they can reenter society better equipped for a useful life.

An interesting example of how a union high school has cooperated with the authorities of a penal institution in carrying out such a purpose is found in California, where the California Institution for Women is located in Cummings Valley, approximately 13 miles from Tehachapi Valley Union High School. The institution was established as a branch of San Quentin in 1933 but was given the status of a separate institution in 1936. Alma Holzschuh was appointed superintendent in 1942.

Inmates Served as Teachers

Before her time there had been several educational advisers or part-time teachers for the few classes which were held. Most of the teaching was done by the inmates.

If the theory of such an institution is that it should be correctional rather than penal in its purpose, education and counseling are certainly necessary. The fact that these services prior to 1942 were limited was due partly to lack of funds and partly to organizational requirements and other factors. The principal instruction then was in subjects that could be taught by inmates.

Shortly after Miss Holzschuh's appointment, a counselor was employed and it was at this time that the Tehachapi Valley Union High School made its appearance upon the scene. A tentative program was outlined according to which our school was to work in cooperation with Superintendent Holzschuh and Miss

Minton, the educational adviser. The plan called for the administration of intelligence and aptitude tests combined with guidance and counseling looking either toward graduation or toward the girls' employment upon leaving the institution.

The first problem to be met was the necessity of instilling in the personnel the idea of correctional work instead of punishment. Heretofore the girls had been paroled to do housework and it was necessary to build up in them a desire to be paroled into other fields of endeavor as well as a realization that this was possible.

There was also the need to establish in each girl a desire for advancement from her pre-institution status, which was given an impetus by the action of the board of trustees of the institution in granting credit for school attendance and shortening a girl's time for parole according to her educational achievement.

As in a regular school, credits for graduation were to be determined by the length of time classes were attended and the quality and quantity of work completed. Vocational training and educational instruction are today integrated with the maintenance duties and other work done by the girls in the institution and are correlated with the results of the testing program.

Upon a girl's introduction to the institution, after the preliminaries required by the regular institution program, the following tests are given: mental and personality tests; achievement tests in mathematics, reading and language; an interest test; mechanical aptitude and commercial aptitude tests. This program was worked out in cooperation with the county superintendent of schools, Leo B. Hart, the tests being given as far as possible by members of the county superintendent's staff and scored at his office. Transcripts of school records are obtained for those interested in completing their high

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Tehachapi Valley Union High School
Tehachapi, Calif.

school education. All of this information, in addition to that obtained from a study of each individual, is used to classify the students. Training is then given the various groups according to their classification.

Our first full-time teacher was Lt. Benjamin F. Stinson Jr., whose personality and knowledge of commercial work helped start the program successfully in the summer of 1942. The subjects he offered were typing, shorthand, bookkeeping, office practice and filing. His classes were large and well attended by the girls who worked in the offices of the institution and those who wished to fill commercial positions after leaving.

The next step in the program was the employment of Mrs. Mary Anderson Binns as a full-time teacher in foods and nutrition, arts and crafts, elementary reading and advanced English. Her work was mostly confined to those who were engaged in cooking and in the various household duties of the cottages where the girls were housed, as well as to those who needed training in elementary reading and English.

Shop Work Highlights Program

The teaching staff was further supplemented by regular day teachers from the high school who held classes after hours and in the evenings at the institution. The high light of the program from the point of view of the girls was the shop work. Inasmuch as it was impossible to take the shop to the institution, 10 pupils were brought in to the class in a station wagon twice a week. The girls were from the honor group and considerable interest and competition among them were aroused by this training, which represents an unusual and significant step forward in educational practice in penal institutions.

Other additions to the faculty included wardens who had had sufficient training along educational lines to be able to obtain credentials. The most outstanding of these was Mrs. Elvira B. Clift, who had two classes a week in power sewing. The commercial teacher held three classes a week in typing, bookkeeping, shorthand and penmanship. The physical education and social science teacher had four classes in speech, drama, physical education and history. The music teacher had one class in vocal music, the shop teacher, two classes in machine shop and welding, blueprint reading, mechanical drawing.

Permanent record cards were set up in the office of the high school for the students at the institution but,

as no report cards were issued, certificates were granted at the completion of definite blocks of work, approximately three of these being equivalent to a high school credit.

Sixty-eight per cent of the residents of the institution were enrolled in one or more classes, typing being the most popular with 47 girls, arts and crafts next with 38 and music with 35. Interest shown by the residents and staff members in the educational and vocational training program indicates that definite assistance has been given to these people. Upon their reentrance into society they will be better adjusted individually to cope with their problems than they were before the inauguration of the educational program.

a year of such training. Twenty-two per cent said, "Three months" and 17 per cent voted for six months.

"When shall the training be given?" Each person could give more than one answer to this question. Out of 91 replies, the votes were as follows: after high school completion, 51; during summer months, 24; age 18, seventeen; as chosen by trainee, nine; age 19, four; older than 19, two.

"Should exceptions be granted?" The 81 reports showed 91 opinions. According to replies, exceptions should be granted as follows: for R.O.T.C., 39; for National Guard, 25; for taking professional courses requiring more than five years of college preparation, 12; for having dependents, 15.

Another part of the questionnaire focused attention on attempts to "bootleg" into the military training program a number of activities that are functions of the school. There was almost unanimous agreement as to the desirability of five definite goals but, with the single exception of the physical examination, it was felt that these goals should not be a part of the military training program. The tabulation of replies below shows the percentages of the number answering each item.

About 90 per cent of the superintendents agreed that "Youths should be reimbursed during the training period for living costs and minimum expenses in accordance with present policies governing pay for the armed forces."

Granting that "Extensive counseling and testing service should be provided to discover the problems, needs and aptitudes of youths" and "Opportunities under guidance should be provided to assist youths in choosing a career," the administrators were overwhelmingly of the opinion that these are functions of the school and not of a basic military training program.

Agreement was virtually unanimous that the purpose of universal military training should be "to provide a nucleus for the maintenance of the armed forces" and "to prepare for unified and disciplined action in the event of war." Such training, according to 95 per cent of the responses, "should contribute to physical, mental and emotional development for participating in modern warfare."

Michigan Schoolmen Express Opinions on Military Training

ARTHUR H. RICE

Editor, Michigan Education Journal

THAT now is *not* the time to jump at conclusions about military training is the opinion of nearly half the superintendents of Michigan's larger school systems.

A poll taken at the annual fall conference of city superintendents showed 53 per cent in favor of enacting laws governing universal military training *now* while 3 per cent said such legislation should wait until the war ends and 44 per cent believed that such decisions should not be made until *one year after* the war ends, "allowing time for basic studies concerning merits of compulsory training." The percentages are based upon 75 replies. Six others had "no opinion."

Not all the school administrators believe that universal military service for youth is desirable. While 70 per cent said "Yes," 17 per cent said definitely "No." Another 13 per cent were "uncertain."

Compulsory military training cannot be justified unless it is "required of all boys, regardless of minor physical defects, such as poor vision," 90 per cent of the group stated. The other 10 per cent thought that "only those boys should be included in training whose physical and mental abilities could contribute directly to modern warfare."

"How long should the training be?" Sixty per cent replied, "One year." Only one voted for more than

GOAL	AGENCY		
	Armed Forces	Schools	Others
A thorough physical examination, should be required of all youths	34	57	9
Corrective measures for disabilities discovered by the physical examination should become an integral part of the program	30	58	12
All youths should experience a program of physical conditioning and development of physical skills	21	75	4
Basic education deficiencies in skills essential for daily living should be discovered and corrected	7	91	2
Citizen education should be stressed	14	81	5

Experiment in Group Administration

WHEN the elementary supervisor left the school system of Rochester, Mich., late in 1942, the elementary schools faced the problem of whether to continue with the conventional administrative practice of having an elementary school principal who was board appointed and fairly permanent, in terms of tenure, or to experiment with the promising idea of professional group responsibility. The Rochester elementary schools have an enrollment of approximately 550 pupils, who are housed in two buildings.

Teachers Favor New Plan

After considering the problem with the board of education, a choice of the two plans was presented to the elementary teachers at a preschool institute. A brief history of the evolution of conventional concepts in elementary school administration was followed by discussion of the possibility of adopting the democratic idea of group responsibility, whereby the teachers select their own administrative committee. The teachers decided that they wanted to experiment with the idea of teacher participation in administration.

The plan is predicated on the fact that Rochester elementary teachers today are as well educated and professionally trained as the supervisors or principals. Most of them have the bachelor degree and some, the master degree. They all read educational periodicals and professional books, attend scores of educational meetings and conferences. Committee work of various sorts has given them opportunities to develop initiative and participative experience. These well-trained teachers are more in need of coordination than arbitrary and, sometimes, autocratic supervision.

The flexible democratic plan adopted by this school system has recognized this change in teacher preparation and background. It has also recognized the increased desire of mature individuals to have a larger share in the direction of the educational program.

Three Teachers Replace One Supervisor

MARY MEHL and E. D. KENNEDY

Second Grade Teacher and Superintendent, Respectively
Rochester, Mich.

The experiment was placed in operation when a committee of three teachers was elected to become the group-principal. The work was divided as follows: One member was to head the administrative division, another, the interpretative division and the third, the division of instruction. Since instruction is dominant, this third member automatically became chairman. The superintendent acts in an ex officio capacity as coordinator.

Committee Members' Duties Evolve

At the outset, the duties of the committee members were purposely indefinite. Their detailed responsibilities grew out of the experience they gained as they went along. Near the close of the first year a general faculty meeting was held, including both elementary and secondary teachers, at which time the plan was outlined for the benefit of all. The duties of each member of the committee, as they had evolved during the year, were discussed.

The member in charge of instruction coordinated instruction and guidance. The orientation of beginning teachers and of teachers transferring from other positions was her responsibility. She also assisted other teachers in instructional problems and informed the general office of needed supplies. Teachers having special problems were referred to the superintendent for further assistance. The division of instruction had

charge of the administration of achievement and mental tests.

The establishment of an elementary library for the children and a curriculum laboratory for the teachers was a part of the work of the committee member in charge of instruction. New textbooks were analyzed and selected on the basis of several evaluations.

Inspection of weekly lesson plans gave the chairman an opportunity to supervise instruction on that level, at least. Committees to work on revision of the course of study and in specific areas of the course of study were appointed. The introduction of the Michigan permanent child record, Form CA 39, was directed by this committee member. The study of a new type of report card was directed by this chairman.

Administrative Duties Vary

The teacher in charge of administration took on many of the routine duties usually performed by a principal or supervisor. Assignment of children to grades and adjustment within the grades was one of her duties. Obtaining supplies, such as chairs, record books and report cards, was another. She checked the census against the CA 39 permanent record forms and the live list, that is, the children enrolled. The establishment of the nonresident enrollment, sending of notices to teachers, arrangement for hall duty, checking of attendance records and double check-

ing of the child accounting reports were routine duties.

One important responsibility delegated to this committee member was the calling of substitutes to replace teachers absent because of illness. She also supervised the custodial staff. In brief, the routine affairs, which ordinarily consume a great deal of the administrator's time, especially where clerical help is insufficient, were performed by this member.

Thought Given to Public Relations

Realizing that good public relations is an essential part of any successful public school program, the third committee member played an especially important part in the work of the administrative group. Some of the activities supported and arranged for by her were: preparing the program for National Education Week, including an interesting meeting for parents and an open house with exhibits; establishing grade newspapers which operated for a time; presenting programs to mothers following children's completion of units of work; preparing news stories for the press, and cooperating in various war-connected activities, such as scrap drives and sale of bonds and stamps. Parents were informed of the progress of their children through the new type of report card, which includes information concerning achievement tests, and through conferences with teachers.

The new report card is a printed form which provides space for marks and written comments by the teacher for each subject. A letter is mimeographed on the back of the form pointing out various educational problems and soliciting cooperation of parents and pupils.

The administrative committee soon found it necessary to have at least one scheduled weekly committee meeting. Many additional meetings are now held when special problems arise which need the approval of the entire group. Parliamentary procedure is followed in all meetings. School problems are carefully and fully discussed and decisions are taken regarding these problems. The coordinator does not attend the meeting unless there is some special report which members of the group wish him to hear or unless he has a special message for them.

Preceding the monthly faculty

meeting, the coordinator often confers with the chairman and asks her to present special messages to the entire group. Then, following the meeting, the chairman has a conference with the coordinator and any motions affecting the policy of the school are presented to him for approval. Most of the faculty recommendations have been accepted and made operative.

One example may be cited. In 1942 the school hours for all pupils were set from 8:30 to 12 o'clock and from 1 to 4 o'clock. It was discovered that these hours were entirely too long for the elementary children and a recommendation was made that they be changed to 9:30 to 11:30 and to 1 to 3:30 for the lower grades and to 8:30 to 11:30 and to 1 to 3:30 for the upper grades. The recommendation was approved.

Changes Made at Semester End

Some changes were made in the administrative plan at the end of the first semester. At first, a staggered election of committee members was the procedure. However, the faculty has now tried another policy, experimentally, of electing all three committee members yearly in January, the retiring members acting as a nominating committee for the new members. Time will determine which is the better method.

In order to accomplish their objectives the committee members have two half hours free during the week for their duties. School time is taken, when necessary, and considerable time after school, when special problems arise. However, the committee members have not felt that the out-of-school-time work, other than that spent on special study committees, has proved especially burdensome. Subcommittees are appointed frequently to assist with work in certain intensive areas.

According to the following statement of a member of the faculty, the plan is giving satisfaction: "The purpose of the coordinating committee is to create a more democratic, co-operative feeling among the teachers and between teachers and the administration. It establishes total group responsibility and representation. This plan meets the satisfaction and the approval of our faculty. The plan is flexible and could be used, I believe, in any system. We like it very much. It certainly works here."

Some consideration should be given to the shortcomings that have been discovered in this plan. While most of the results are on the credit side of the ledger, there are some weaknesses.

Probably the amount of time required by the administrative and the instructional members is somewhat greater than that required by the interpretative member. This is true because a greater emphasis has always been put upon administrative and instructional activities than upon those of a public relations nature. There is a broader range of experience in these fields which has not provided a suitable background for the public relations or interpretative chairman.

There is also a little feeling on the part of some teachers that they do not care to be criticized by their peers. Frequent discussion in the general faculty meeting pointing out that the committee members are freely elected representatives and, therefore, entitled to the respect and cooperation of their fellow teachers has done much to break down this feeling. A responsibility has been given to these three persons and they cannot function in a happy and successful manner unless their constituents support them intelligently and with a good attitude. This is excellent training in practical democracy.

Much Hinges on Members' Ability

The success of any research work, whether it is done under this plan or under the normal supervisor-principal plan, depends upon the training and experience of the various members of the faculty. There is nothing to guarantee that a more scientific job will be done under this plan than under the previous one except that under the present democratic arrangement the teachers are doing the job because they *want* to do it.

As the plan grows and extends through the years and faculty members become accustomed to it and new faculty members come to understand it, there will be an opportunity to demonstrate whether or not it is more than a passing fad. Time will determine whether teachers actually want democracy in administration or whether they just want to talk about democracy in administration. It is a plan which requires vision, understanding, cooperation and the desire to progress.

A STATEWIDE In-Service Training Plan

devised to meet a war-time need

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WAR, with its staggering problems, often has tragic effects upon education. At the same time the abnormal conditions prevailing in war time present challenges which may lead to advances of immeasurable value. In-service training of unprecedented scope, a new type of cooperative experiment in teacher education described in this article, is the way in which one state has met a challenge.

The various citations I have used throughout are from numerous letters received from school people participating in the plan.

"This move to have instructors from the colleges come to the school and help the teachers has been something the administrators, I believe, have longed for for a great many years."

Present conditions were among the immediate factors which led the Washington State Board of Education to establish a statewide plan for in-service training of teachers. The plan encompasses the entire teaching force in the state. An appropriation from the legislature for payment of maintenance and traveling expenses to college instructors participating in the program has made it possible.

The state office of public instruction and the five public teacher training institutions are together furnishing this experimental type of education for the teachers of the state. The eastern, central and western colleges of education provide the instructors for the elementary level, and the University of Washington and the State College of Washington, for the secondary level. Most significant for teacher education is the fact that all of these institutions are supplying their staff members as a service to the public schools. The program is administered by the state

office of public instruction, to which the state board has delegated the authority for determining the areas in which the educational service is to be given.

This is the way the plan works. Let us say that a group of superintendents in Grays Harbor County decides it wants an in-service training program. The schoolmen find that interest is manifested among their teachers, particularly in pre-induction, reading, guidance and social studies in high school. The group, therefore, makes application for the program to the state office of public instruction.

Once an area has applied for the in-service program, the state office calls a meeting of administrators and representative teachers in the area to discuss the purpose of the program, the type of plan which will function best in the county, the preliminary preparation necessary and other details. Following a consideration of applications from all over the state and an allocation of time to as many areas applying as possible, the office selects the Grays Harbor County area, let us say, for the in-service program of the University of Washington during the first six weeks of the winter quarter.

In order to keep expenditures at a minimum and to provide a workable plan, the state has been divided into flexible zones, two for the secondary training institutions and three for the elementary training institutions. Although the practice is to have only one institution servicing an area at any one time, Grays Harbor County may apply later for the program for its elementary teachers.

"'Learn while you earn' might well be the reverse slogan for the in-service training program inaugurated this spring."

Under the statewide plan, college instructors come to the individual schools during the school year to assist the teachers with their problems. Little interest has been shown in earning credit for this work although it is possible to obtain such credit through the extension division of the institution.

The specific schedule for an area is developed by the director of in-service from the institution. Last spring one of the areas where the program was conducted used the workshop plan with classes held at scheduled times in certain centers for a six weeks' period, supplemented by individual conferences. Other areas followed the special service plan which includes no classes but permits instructors to work in a larger number of schools throughout the area selected. It is the more flexible of the plans since no credit can be earned and, therefore, no general schedule need be maintained for a six weeks' period in any one location.

In one year approximately four areas, usually counties, are served by each institution, for a maximum period of six weeks each.

"The instructors have come for a week at a time and worked with our teachers in their classrooms."

In a few cases the colleges have released one or more staff members full time for the quarter. Others release them for a period of approximately one to three weeks, alternating instructors in the different areas. The full-time staff members are in all cases supplemented by others who may serve for a few days.

County superintendents have assisted materially in forwarding this new experiment in teacher education, furnishing transportation from school

to school, arranging details of meetings and informing teachers about the service.

●
"We went over the arrangement of schedules for the day's work, different methods of teaching and the use of different teaching devices."
●

The instructor who works "on the job" with teachers has the advantage of having a natural laboratory at his disposal in which ideas can be put into practice. Evening and after-school lectures and discussions are supplemented by classroom observation. Recommendations for improvement can be made in the light of the local situation. The

visitors' observations are used as a basis for individual conferences and for obtaining a general overview of the school program. General group meetings and building meetings supplement the individual conferences. Some instructors give demonstration lessons for the teacher. Materials are brought along and their use is discussed; at times bibliographies and outlines are furnished.

The reports which the college staff members have made indicate that in different schools they helped to plan and equip a library, cooperated in evaluating textbooks to be purchased for the next year, helped in selecting supplementary classroom references, consulted with the superintendent regarding the purchase of professional books, conducted excursions. One instructor tested a problem child; another spotted a mirror-reader in the class and worked with the teacher on the problem; another gave advice on report card revision and the reading testing program. Many sent back materials upon their return to the campus. In some instances, staff members have worked out extensive outlines or suggestions for teachers.

●
"As a result of the visit to our school, the librarian has purchased \$50 worth of the newest supplementary readers."
●

The results of a new venture of this nature must be judged rather informally by comments received and other evidences of interest and observable effects upon the schools. A final evaluation cannot be made until after a period of years when the influence of this procedure upon education in the state begins to show itself.

In some cases, rural teachers have traveled 30 miles to attend the general evening meetings held in the centers. Comments sent in to the state office from the field indicate a hearty reception and a desire for follow-up work.

From the college staff members who have participated in the program has come an enthusiastic response. Many see it as the type of contact with the public schools for which they have long felt a need. The cooperation of all of the public teacher-training institutions and their vision of the needs of education have been important factors in the plan's success.

It's Time to Plan for "The March of Dimes"

GEORGE ENGELHARDT

The National Foundation for Infantile Paralysis

THE ingenuity and enterprise of American school children in conducting their own campaigns to aid the annual "March of Dimes," to be held this year from January 14 to 31, have proved invaluable in raising funds to carry on the fight against infantile paralysis.

Especially is this true in sections of the country that have been hit by epidemic outbreaks of poliomyelitis. By seeing their dimes at work in helping their playmates back to health, the boys and girls of the nation well know the value of "investing" in the National Foundation for Infantile Paralysis.

High school pupils have devised a wide range of fund-raising activities. School dances always have been popular and successful. With music supplied by their own orchestra and a contributed dance floor, the boys and girls are able to turn all receipts in to their campaign fund and have a good time doing it.

School plays, staged by the young people themselves, are also an excellent form of entertainment and source of revenue.

Athletic contests and games between class teams and with neighboring schools, with modest admission fees, have netted these young campaigners a substantial return.

In various towns and cities "Mile O' Dimes" booths and "Wishing Wells" are manned by high school pupils, with incidental music being furnished by school bands and drum and fife corps.

Nor are all such activities limited to high school pupils. Right on down the line through the elemen-

tary grades, children have thought up ways and means of helping raise funds for the fight against polio. Coin collectors are placed in classrooms and by voluntarily going without a bit of candy or a movie, the children are able to drop their pennies, nickels and dimes into the box. Keen competition develops to see which class can raise the most.

The very young children, with less spending money, call their "March of Dimes" campaign the "Parade of Pennies" and get as much fun out of it as their older brothers and sisters.

Other junior campaign ideas that have greatly aided the annual appeal of the national foundation are "tag day" solicitations; cake and candy sales (usually such goodies are made by the young people themselves); poster and essay contests based on polio, with the winner participating in a radio broadcast or other local activity. Manual training and sewing classes and "victory gardeners" hold bazaars and fairs, donating the fruits of their labors to raising money.

The President's birthday greeting card, with slots to hold 20 dimes, is one of the most popular "March of Dimes" features. Spirited competition develops among card holders to fill their cards within the two weeks' period, at the end of which time the dimes are sent to the White House.

With their ever-increasing knowledge of poliomyelitis, emphasized by the serious epidemic outbreaks of this year and last, the youth of America is increasingly interested in helping to combat this plague.



A typical exhibit on Northwest Indians.

The Mountain Goes to Mahomet *in the form of traveling loan exhibits*

THE Children's Museum of Boston has never been content with serving merely the children within its own gates. Almost from the beginning, it has sent out loan exhibits to schools, libraries, scout troops, playgrounds, clinics, children's hospitals, handicapped and shut-in children for two week periods. The only requirement for this service is that borrowers arrange transportation.

Exhibits Widely Used

Today loan exhibits from the Children's Museum not only serve Boston and New England but go as far south as Alabama. They have traveled to different parts of the country where other museums or groups have wished to start a like service. It is estimated that these exhibits have made educational contact with more than 2,500,000 children a year.

Twenty-three branch libraries of Boston have exhibits which they change at intervals throughout the year. These are used in correlation with certain books or with story telling or talks to groups. In general, however, it is the schools which make the greatest use of the Children's Museum loan material. Be-

BERNICE ELLIOTT

Children's Museum, Jamaica Plain, Mass.

sides the schools of Boston, those of 40 small towns in the vicinity use the exhibits regularly. There are now more than 200 available for lending.

These fall into three categories: natural history, social science and charts. Among the natural history exhibits are: Birds That Go South in the Fall, Birds of Economic Value, Minerals and Their Uses, Geology of the Boston Basin, Corals and Sponges and so on. Under social science are included exhibits on the various countries of the world and periods of history. Among the titles are: Ages Ago, Ancient Greece and Rome, Early America, Knight in Armor. The charts have to do with cotton, flax, paper, rayon, rubber, silk, wool.

Materials Used Are Not Costly

The material in the loan exhibits is neither rare nor costly. Most of it could be replaced if it were lost. Damaged specimens, duplicates, souvenirs of foreign lands, models of various objects and miniatures are types of things used. All material in the loan boxes can be handled. The

child can *smell* the sandalwood, *feel* the texture of raw silk and cotton, *hear* the hollow reverberation of metal on metal.

Each box is assembled with the intention of making it colorful and pleasing to the eye as well as instructive. Colored mountings are used.

Cases Can Be Carried Easily

With the exception of wooden boxes used for bird exhibits, the loan cases are especially made of heavy cardboard in a uniform size, 18½ by 12 by 9 inches, and have a webbing strap to facilitate carrying.

They contain both articles and pictures and their contents are labeled. Bird boxes contain separate specimens mounted on wood which can be studied from all angles.

Captions tell the story as follows.

River ducks feed mainly in shallow water. They tip up to reach their food on the bottom or dabble along the margin of the pond or river, rarely diving as do sea ducks.

Inside the bill is a comb-like structure through which the mud and water drain off when the bird rights himself after reaching down for water plants and small aquatic animals upon which he feeds.

Riker mounts are used for butterflies and moths with construction paper in contrasting color. The butterfly box contains 13 specimens native to a locality. Heavy objects, such as minerals, coral, rocks and volcanic specimens, are mounted on composition board. With these also, colored papers add to the effect. Light blue paper makes an attractive background for the pink, amethyst, smoky and crystal quartz. Copper wire and cement are employed when necessary for mounting. Extra pictures are included in these boxes to

show the use of minerals and such processes as mining and smelting.

Sea life specimens are mounted on cardboard and are arranged according to whether they are found on sand, in mud or on rocky shores. Cards show how they get their common names, how they travel, how they are protected.

The boxes on trees and woods contain specimens mounted on cards, a map of the area where the tree grows, pictures of the bark, leaf, flower or fruit. Illustrations from *American Forests*, *National Geo-*

graphic and *Natural History Magazine* are included. A picture file is kept in the museum so that pictures on various subjects will be ready when a new box is to be assembled.

The social science box is useful for special class groups and is widely used by scouts in gaining the worldwide badge. Costumes of various people are shown with examples of their folk arts and decoration. If the country is rich in minerals, specimens are included; if it is industrial, the industries are shown. A number of mounted pictures illustrate the architecture, agricultural pursuits, shelter, clothing and other significant aspects of the country.

Chart loans are contained in boxes about 24 by 17 inches and consist of specimens and drawings mounted on a large board which can be hung on the wall.

In every case an attempt is made to supply a box that can be transported by hand, if necessary. Twelve or 14 boxes can be carried in a station wagon or ordinary car by using the car trunk. The public libraries and schools of Boston send trucks to transport loan exhibits to their branches.

Material Is Card Cataloged

The museum maintains a card catalog of loan material and borrowers may make reservations in advance for materials they will need. Exhibits are always checked when they are returned. Small repairs are made between lending periods. Specimens require remounting about once a year. Since the boxes are continually moving, no precautions against moths or other enemies of stored material are necessary.

The teacher, as well as the museum, is responsible for the effective use of a loan exhibit. She may merely lay the material out for display or she may do research of her own which will prepare her to present it to advantage.

One school placed its loan material in a case in the front hall where different groups were brought to see it. A teacher in Norwegian costume told about the material in a Scandinavian exhibit, making the subject very much alive.

The exhibits are not intended to replace the teacher's work but to illumine a subject and to stimulate pupils to do research of their own. Teachers report that children who

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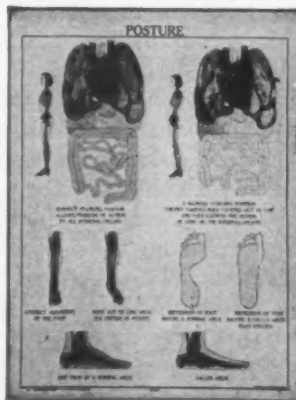
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Effects of Nicotine
Effects of Alcohol

House Fly and Mosquito
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have not cared about using the dictionary look up words willingly when this is necessary to the understanding of an exhibit.

The exhibits are especially helpful in gaining the attention of slow classes. One girl in such a class became interested in bamboo and did her first bit of original research on this subject in the library. Her father, encouraged by her interest, took her to Chinatown, after which she gave a talk before the class.

In normal or accelerated groups, the loan material is used in connec-

tion with art work, oral and written English, geography. Some children draw, some write, some talk on the subject.

Visiting teachers carry the boxes to handicapped children. A group of cardiac children became so much interested in a particular exhibit that the teacher had to supply books on the subject to satisfy them. Exhibits are of inestimable value to the blind. Handling silk cocoons, wood carvings, mounted animals and birds gives them keen pleasure and an understanding of much that could

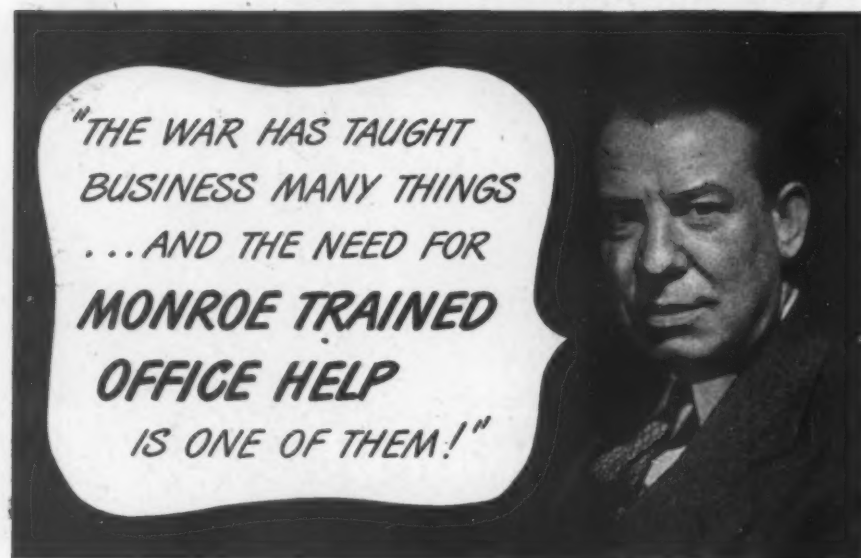
not be made clear in any other way.

Many boxes are used in Americanization classes. A sense of pride may be developed in the foreign-born who are led to see that they have much in their heritage to contribute to the country of their adoption. If a teacher is clever, she can use an exhibit to bring out a shy, foreign child and make her seem important to the other members of the class and to herself.

Children often become interested in starting collections of minerals, butterflies and coins of their own.

After a taste of the museum through a loan exhibit, children show a different attitude toward it. A study of Egypt may be a fairly dry subject. It is given life, however, by a loan box containing a bit of a real mummy case, an amulet, linen wrappings, pictures not found in the child's geography. All these give him a background for, and an interest in, what he sees when he goes to the museum.

In the future it should be possible for museums to pool material for use as circulating libraries use books. Far-seeing educators are already looking to the day when traveling exhibits will serve the country districts as the traveling library does today.



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The following films have been selected by the Department of Library and Visual Aids, Newark, N. J. All have been used successfully in Newark public schools.

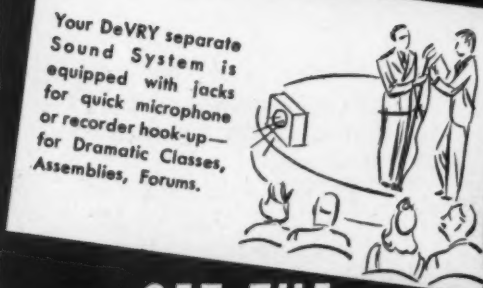
For the address of your nearest film depository write to the *Educational Film Library Association*, 45 Rockefeller Plaza, New York City, or the *Coordinator of Inter-American Affairs*, 444 Madison Avenue, New York City.

ABOUT FACES—11 minutes. 16 mm. sound. For grades 9 to 12 in health classes and for adult groups. *Educational Film Library Association.*

The importance of proper dental care is stressed in this story of Danny Smith from the cradle to his induction.

SOUTH OF THE BORDER WITH DISNEY—40 minutes. 16 mm. sound. For grades 5 to 12 in social studies classes, for school assembly programs, P.T.A. meetings. *Coordinator of Inter-American Affairs.*

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THE SCHOOL CAFETERIA

CONDUCTED BY MARY D. GARMO BRYAN

"Type A" Lunch First Choice

EDNA GILBERT

Lunchroom Director, Board of Education
Youngstown, Ohio

IN SERVING Type A lunches we use a small bright-colored card with "V-Special" printed on it. The child picks up one of these cards at the beginning of the line and places it on his tray. Servers are instructed to look for this card and see that the Type A lunch is correctly served.

When the child reaches the checkers, he turns in his V-Special card and pays 15 cents, the prevailing charge. If he has selected an à la carte dish along the line, a soup or dessert, the price is added. At the end of the lunch period these V-Special cards are counted. Each school keeps a record of the number of such lunches served daily. This total is reported to the central office weekly.

Tickets Are Checked

A counter record is made of all sales, both à la carte and special, and the V-Special tickets are checked by the manager against this record. Some one item sold on the special is always identified from the same item sold à la carte and is used as a check against the count of tickets.

Meal tickets priced at \$1 are also helpful in encouraging a child to purchase Type A lunches. Spaces for punching the individual amounts are provided. Parents are informed of these tickets and, if they wish to have proper control over what the child selects, they can instruct him to purchase one meal ticket a week. He will then be able to have a Type A lunch every day with a 5 cent margin to add one dish of his choice. We find this is usually a dessert.

The complete cafeteria menu is planned around the Type A lunch. In other words, the Type A lunch is chosen first from a list previously prepared and cost figured. The à la carte menu is, therefore, planned to include all the items on the Type A



or so-called V-Special. One soup, a salad, a vegetable, not on the "special," and a choice of two or three desserts are offered in addition. No substitutions on the "special" are permitted.

By this method a child has the privilege of making a choice. At the same time the "special" is so attractive from the standpoint of both food value and price that the sales have increased constantly each month. The child, therefore, is being educated in the proper food selection without his being fully aware of it.

After taking all expenses into consideration, we operate on a 62 per cent food cost and adhere to that amount as strictly as possible. The selling price of all items, whether the combination "special" or à la carte, is determined by using that percentage. Therefore, to arrive at the prevailing charge to the pupil the cost is figured by the same method, and to be able to serve the Type A lunch we use the full 9 cents as a base.

To explain more fully, a 24 cent Type A lunch is served.
62% of \$0.24 = \$0.1488... Food cost.
38% of \$0.24 = \$0.0912... All expenses, including labor, cleaning, paper supplies and so on.

Nine cents, or 60.4 per cent of the \$0.1488, is the indemnity; \$0.0588, the difference, covers the remainder of the food cost.

$$\begin{aligned} \$0.1488 - \$0.09 &= \$0.0588 \\ .0912 + .0588 &= .15 \end{aligned}$$

All costs are figured upon recipes that are standardized for the number and size of portions. Of course, it would not be possible for each Type A lunch to cost exactly \$0.148. However, we have some 57 different combinations, with food costs varying from \$0.126 to \$0.175. The average for those served during a week must be approximately 15 cents.

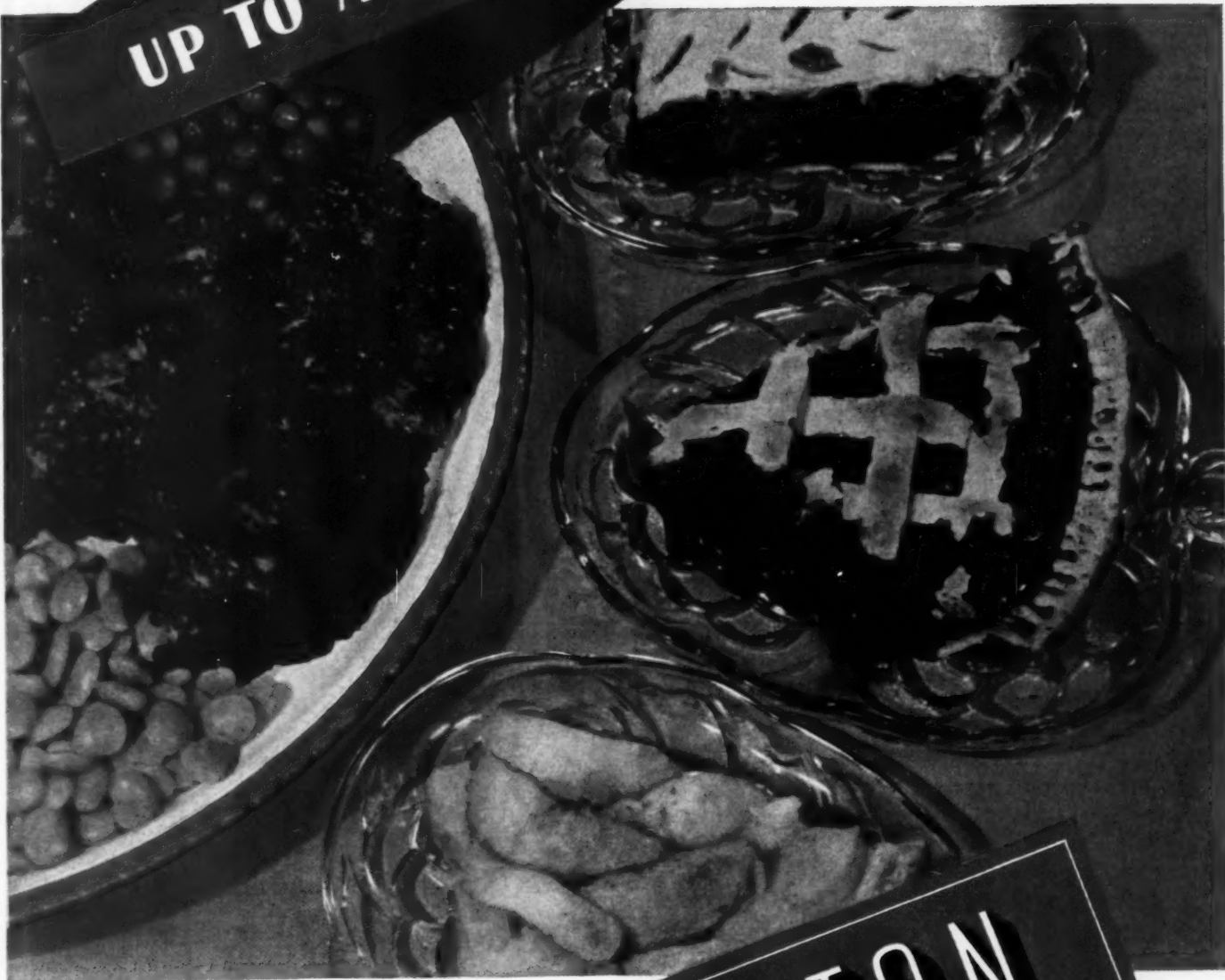
When the individual school's report for the month is received in the central office, it is compared with the weekly amounts previously given. These must correspond exactly.

How Food Costs Are Checked

At the present time we are making an additional check on the food cost. Here is the method. Each school reports its inventory on a form listing the foods served on the Type A lunch first. Purchases during the month for these foods are recorded on a voucher using the distribution corresponding to that on the inventory report. From the voucher they are then posted to the cash payments register, again using this distribution. By using the accounting formula of adding the beginning inventory of the Type A foods to the purchases and deducting the final inventory, we have the cost of the food sold on the Type A lunch.

By multiplying the number of V-Specials by the 15 cents, it is possible to determine what per cent the specials are of all sales. This percentage is used to determine the food cost. For example, if the specials prove to be 30 per cent of all sales, then 30 per cent of the inventory on

UP TO A STANDARD

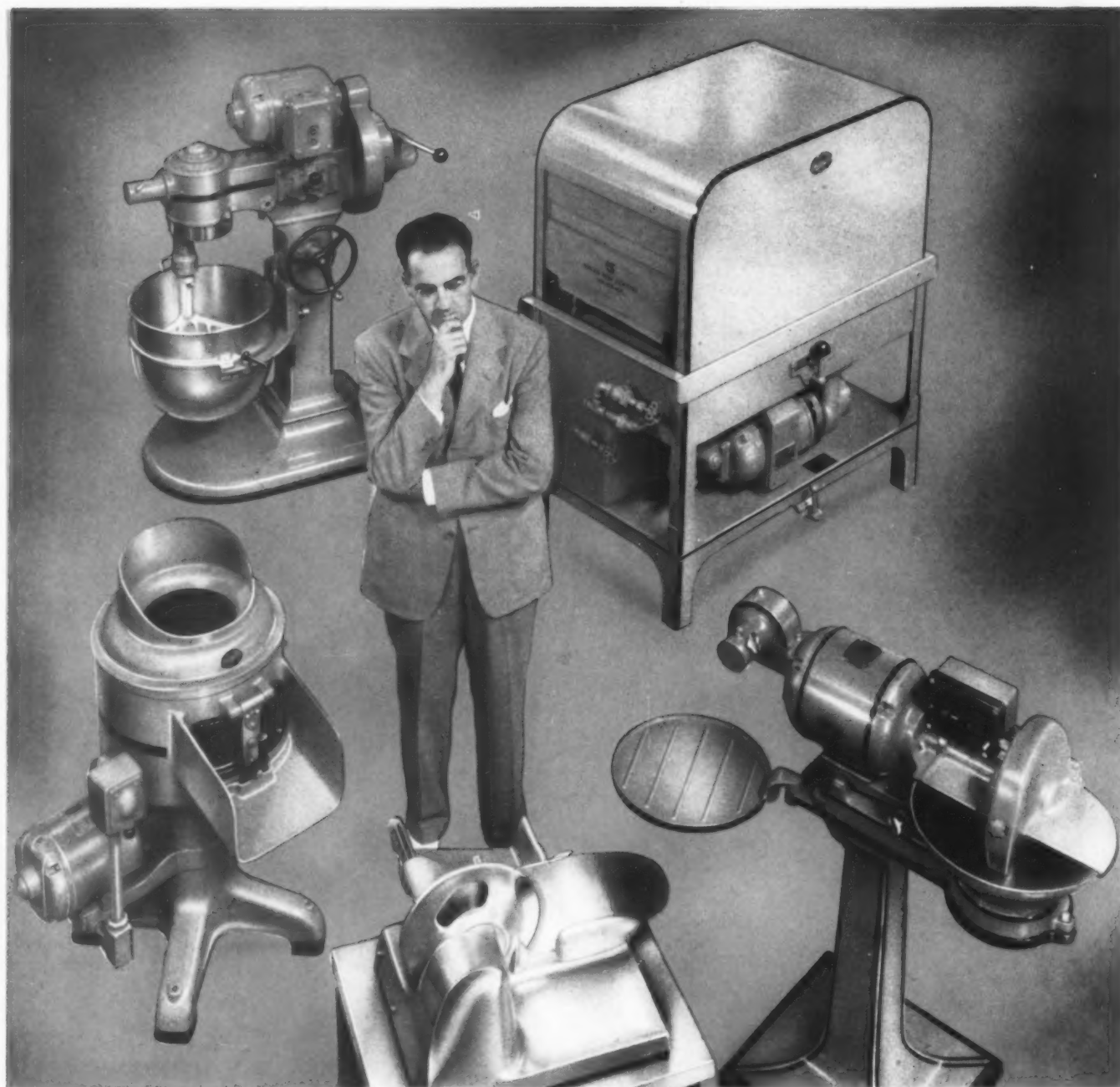


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Good food for pleased guests



How Soon?

SHOWN here are a few of the best-known members of the Hobart pre-war line of food preparation machinery. They are typical of the products that will be available to you when we are free to supply you again.

WHEN will that be? **HOW SOON** will that day come?

There is no way to say. Like you, we have our own ideas of when the war will be won, but they are merely ideas—nothing more.

So we can only say this — when Hobart facilities are released from their present wartime duties, our entire organization

will swing into the job of producing the equipment you need—as quickly as we possibly can without sacrificing the quality that you expect in any food preparation machine that bears the Hobart name.

When we “convert for peace” you may expect us to use the same energies, the same resources, and the same all-out cooperation that were employed when Hobart converted for war.

HOW SOON that will be we can't say. But the day is coming and we'll be ready for it.



The **Hobart** Manufacturing Co.
Troy, Ohio

Factories in Troy, Dayton, and Greenville, Ohio, U.S.A.
CANADA • ENGLAND • BRAZIL • AUSTRALIA • FRANCE
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these foods is used and the same for the purchases. Thirty per cent of the beginning inventory on the specified foods added to the 30 per cent of purchases minus the 30 per cent of the final inventory is the food cost.

For the one month trial, the cost has corresponded favorably with that figured by the original method. However, it can be understood how one school with more efficient management might have a lower food cost than one less efficient. The better managed school should, therefore, have the benefit of any practices of good economy.

"Type A" Lunches

I	
Hamburg with tomato sauce	\$0.0822
Spinach	0.0322
Whole wheat bread	0.01
Butter and margarine	0.006
Milk	0.04
	<hr/>
	\$0.1704
II	
Chop suey on rice	\$0.0434
Cabbage and green pepper salad	0.0266
Bran muffin	0.0133
Butter and margarine	0.006
Milk	0.04
	<hr/>
	\$0.1293
III	
Baked beans	\$0.0382
Creamed cabbage	0.0224
Whole wheat bread	0.01
Butter and margarine	0.006
Milk	0.04
Orange, sliced	0.0256
	<hr/>
	\$0.1422
IV	
Vegetable soup	\$0.0344
Peanut butter sandwich	
Peanut butter and jelly	0.0402
Enriched bread	0.01
Butter and margarine	0.0065
Milk	0.04
Grapefruit cup	0.0231
	<hr/>
	\$0.1542
V	
Escalloped hard cooked eggs	\$0.0554
Celery and carrot strips	0.020
Corn muffins	0.0124
Butter and margarine	0.006
Milk	0.04
Baked apple	0.018
	<hr/>
	\$0.1518
Average	\$0.1495

DIETITIANS DISCUSS

School Lunches

SCHOOL lunch programs of the future will be a part of the total educational program of a school or a school system and the heads of food departments will be trained dietitians. This was the consensus of the speakers at the session on school and college food service at the annual gathering of the American Dietetic Association in Chicago. Those emphasizing this point were Ruth Heckler, food service director, Wyandotte High School, Kansas City, Kan.; Winning Pendergast, school lunchroom general supervisor, Detroit, and Dr. Lydia J. Roberts, Ph.D., University of Chicago.

An Integrated Lunch Program

Miss Heckler described how the school lunch program is integrated in the general program of the Wyandotte High School through cooperation with the physical education and home economics departments, faculty members, parents and pupils. By means of posters, food models, sample trays showing adequate lunches as well as breakfasts and suppers, pictures of vitamin sources, the importance of proper diet and nutrition to health and efficiency is brought to the children eating in the school lunchroom. Articles appear in the school paper on nutrition and health habits written by school reporters. Home economics pupils write special articles.

Mothers, many of whom think the lunchroom is operated merely to make money, are educated by giving them a chance to see the food unit in operation. The P.T.A. organizes the mothers in groups to visit the food department on different days, and the dietitian goes to all P.T.A. meetings.

Subsidies Essential

Winning Pendergast emphasized that money underlies most school lunch problems. The school lunch program of the future, as increasing demands are made upon the board of education budget and the city tax dollar, will have to compete even more strongly than it is doing today for its share of these funds, and food

service heads will have to show that good nutrition is paying big dividends in better health and scholarships in order to get it.

Only 70,000 pupils in Detroit, a small proportion of the total school population, are now getting one hot meal a day at school. Federal aid is being received and types A and B lunches are being served. Whether federal aid is continued after the war or not, Miss Pendergast feels that the school lunch will have to be subsidized from three sources (1) the board of education, (2) the state and (3) the federal government in times of depression and according to need in other times. She believes permanent federal legislation with regard to school lunch subsidies should be delayed until there is a clearer picture of what is needed and wanted by schools.

Dietitians Should Back W.F.A.

Doctor Roberts also spoke of the need for money in obtaining adequate nutrition for school children, but in her opinion it is the amount of money in the child's pocket that determines the type of food he buys. Study has proved that if a child has enough money, if it has not been siphoned off by paying for athletic tickets or for buying war stamps or other purposes, he will buy an adequate lunch.

The school lunchroom, run by a trained dietitian, affords an opportunity for checking the results of serving an adequate lunch and showing the extent to which the lunchroom is operating as a nutritional measure.

The W.F.A. has given food service workers a chance to do what they have long wanted to do. It is the duty of all dietitians to back up the W.F.A. to see that the requirements of the program are being carried out and that lunches measure up to the standards set. Doctor Roberts' final recommendation was that only that food should be served in the schools that children ought to have and that only those schools which adhere to this principle should be reimbursed.

Building Inspection Pays

ROGERS B. JOHNSON

Former Superintendent of Building Maintenance, Harvard University

A YEARLY stocktaking of the school building and its equipment and the way in which it is fulfilling its educational purpose is a necessary function in any school system.

The selection of the inspector to make an inventory of a building's qualities is fundamental. The man chosen should know buildings, their construction, their possible weaknesses, the shortcomings of heating and lighting systems and, furthermore, should have a definite idea of how a particular building is to be used. He must have an over-all picture of the function of buildings as part of an educational plant. He must realize that the buildings are a means to an end—education—and not an end in themselves. If they do not make better education possible, if they do not serve the community better, they are not properly maintained or arranged.

Various attributes of a building should be evaluated and in making a building inspection it is desirable to follow a standard pattern. Observance of such a pattern gives assurance that no item is overlooked and, furthermore, makes much easier the analysis of the inspector's reports as the pattern for all buildings is the same. The order of the following paragraphs shows such a pattern.

HOUSEKEEPING

The fundamental consideration in any building is the housekeeping. It is a barometer that gives a good clue as to the building's general condition.

Satisfactory housekeeping calls for cleanliness in the public spaces, absence of "junk" and unnecessary and untidy storage in the less used sections of a building.

Efficient placement of the furniture in all parts of a building is indicative of satisfactory housekeeping.

SAFETY

Freedom from fire hazard is the most important phase of safety. The type of building establishes the general degree of fire hazard but there are many details of arrangement and of operation which affect the fire problem.

Installation of automatic sprinklers, particularly in basements and storage spaces, including closets, should be carefully considered. Fire stopping of walls and partitions should be checked. Openings through stairwells or through ventilating ducts should be checked and recommendations made for proper protection. The housekeeping of closets and storerooms and the method of taking care of waste paper should be investigated.

The fire alarm system must be appropriate and its maintenance should be carefully inspected.

Means of exit from a building should be checked with respect to their efficiency in emergencies and in daily use. It is entirely possible to have emergency exits satisfactory and at the same time to have those in normal daily use unsatisfactory and time-wasting.

Throughout a building there are various minor hazards to life and limb, such as badly lighted stairs, slippery floors, uneven floors with consequent tripping hazards, stairways without proper handrails, outside steps which have an excessively high riser from the ground level to the first step caused by the sinking of sidewalks and other defects which the careful inspector will be sure to find.

There are a few hazards from falling plaster, improperly fastened electric light fixtures and their glassware but in general such dangers are not particularly numerous.

There are various hazards from mechanical equipment, such as ele-

vators, dumb-waiters, unprotected fans and belts in shops, and numerous others in laboratory buildings.

FUNCTIONS

The competent inspector should check on the efficiency of the use of the building. It may be that there is a great deal of unnecessary travel resulting from queer location of various departments, causing a tangle of traffic. This may be easy to obviate by simple changes. Some rooms may be overcrowded and others under-occupied and an efficient rearrangement of space may be indicated so that the building can fulfill its function better.

It may be that some necessary room is lacking or is of unsatisfactory type, such as a basement room with a low ceiling which is used for a gymnasium and auditorium. The inspector's report should carry a notation of any such lack or inefficiency.

MECHANICAL SYSTEM

The efficiency of the heating and ventilating systems and the quality of their maintenance should be checked. Operating savings may be realized by the installation of automatic heat control.

The lighting system in most schools is inadequate as to both the quantity and quality of light. Too many schoolrooms are lighted with white glass units of small size which lead to eyestrain because of glare. There is a great opportunity for eyesight conservation by the installation of lighting systems with adequate intensities and proper quality. The two are necessary, although many will think only of the intensity.

The plumbing system should be gone over from the point of view of maintenance and adequacy of installation. It may be that water pipes show distress at the joints, particularly the hot water lines, or that the

FIRST STEP IN
YOUR POSTWAR
PLANNING

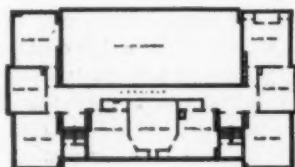
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Modernize with

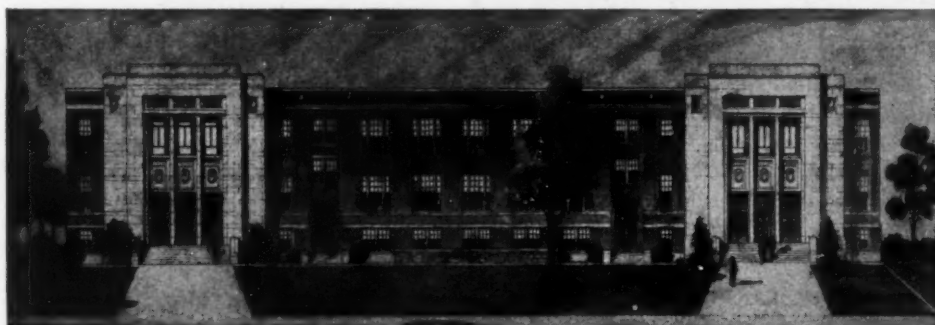
NESBITT

Syncretized Air

WE believe that in the early days of reconstruction, school boards will find it easier—because of expected shortages—to undertake and complete the modernizing of old schools before the construction of new ones. For new schools OR old, the Nesbitt Syncretizer Unit Ventilator is ready NOW.



Original Building, Erected 1921



HERE'S HOW THEY MODERNIZED IN BOYERTOWN, PA.

After the crowded and uncomfortable Boyertown High School was enlarged, it was approximately twice its original size. In this new school, replacing obsolete warm air heating, was installed a steam system and 29 Nesbitt Syncretizers. The new building—doubled in size—required less than 13 per cent more coal per heating season! More significant, classroom comfort became a reality. As a consequence, the Board of Education installed Nesbitt Units in two additional modernized schools.

The economy and the comfort effected by the Syncretizer are the direct results of the co-ordinated action of the Air-stream and Room Temperature Controls which prevent cold drafts and overheating.

Three-year
Averages

205 tons of coal
to heat old building

SAVING

231 tons of coal
to heat new building
twice as large



Building Enlarged 100 per cent;
29 Nesbitt Syncretizers Installed



THE SYNCRETIZER IS MADE AND SOLD BY JOHN J. NESBITT, INC., HOLMESBURG, PHILADELPHIA 36, PA.
SOLD ALSO BY AMERICAN BLOWER CORPORATION

supply on the top floors is inadequate because the main to the street is old and partially clogged with rust.

DECORATION

The interior decoration of a building is what the general public notices most, next to cleanliness. Fresh paint will always make a building look clean but the proper selection of the color and texture of paints makes the difference between a building which the public considers perfect and one which is just another school building.

The clever inspector should recommend changes in color scheme, the use of dark colors on lower walls where surfaces are easily soiled, variation in color between north and south rooms and the studied use of several colors in a building rather than the monotonous sameness so often prevalent.

INSIDE MAINTENANCE

The term "inside maintenance" is a general one which applies to the mechanical condition of the immovable parts of a building. The condition of woodwork, hardware, windows, window cords, floors, plaster, blackboards, school furniture and the like comes under inside maintenance.

In any general inspection, such as this article contemplates, the detailed shortcomings of such building features cannot be cataloged but it is possible to give an over-all picture of the general condition of inside maintenance.

OUTSIDE MAINTENANCE

The outside inspection should be left until last as during the inside inspection various roof or wall leaks may be found which must be checked on the outside.

It is best to start at the top of the building and work down. The first items to look at are the chimneys, including the pointing of the brickwork as well as the flashings. The roof covering, particularly the valleys, must have a careful going over. Gutters, especially if they are located on top of the outside brick walls instead of overhanging, are common causes of wall leaks. Conductor pipes frequently are plugged at the bottom or have holes near the top which allows water to run down over the outside of the building.

Stone and brick work may need pointing and outside woodwork may

need painting. In connection with painting, the south side of the building is subject to much greater wear than the north side, particularly the window sills. It may be necessary to touch up such exposed sections before recommending the painting of the whole building.

RECOMMENDATIONS

After the inspector has finished his detailed checking of the various items mentioned, his most important function is to make a definite and concrete recommendation of necessary work to be done on the building. He should be as specific as pos-

sible and state reasons for his recommendations. It is easy to go over a building and report that it is shabby and poorly maintained but to be of maximum value an inspection should state, for example, that the lighting system in room 300 should be changed, that room 100 should be repainted a lighter color, that the main stair well should be enclosed and so on.

It is desirable to list future recommendations and the approximate time when they should be carried out. Such a periodic stocktaking of each building in a school system will ensure proper upkeep.

BETTER PLANT PRACTICES

"Sweeper Boys"

They might also be called junior custodians, or custodian aides. Anyway, James J. Ball, assistant superintendent in charge of business management, Denver public schools, has been using certain pupils in this capacity for many years and has found them most helpful in sweeping, cleaning and making themselves generally useful. Particularly during the present manpower shortage are they proving a real boon.

Mr. Ball would have it known that he uses only boys who are in school. "If the boy leaves school," he explains, "or falls behind in his studies, so that we feel that he is losing a lot by working for us, we drop him from our corps."

"Our starting wage is 30 cents an hour and the boys receive 35 cents after they have worked two months. You may wonder how we can get boys at this price and the answer is that we do not get the older boys at the present time because a great many of the local concerns pay up to 87½ cents an hour for such boys. As a matter of fact, our city parks department hired boys to drive trucks and do work in the parks ordinarily done by men and paid them the same wages they were paying men for that work."

"We do not try to compete with these groups because throughout the years it has been our feeling that we were providing work so that boys could stay in school and we feel that is still the case and that if boys can make good wages because of the shortage of manpower, we should not try to hold them by increasing our wage scale. Besides, some of the work that is offered to boys now gives them better experience for the future than our work would."

"We are still able to maintain our quota of youngsters although they are much younger than they were before the man shortage. Our state laws allow us to hire boys of 14 years of age."

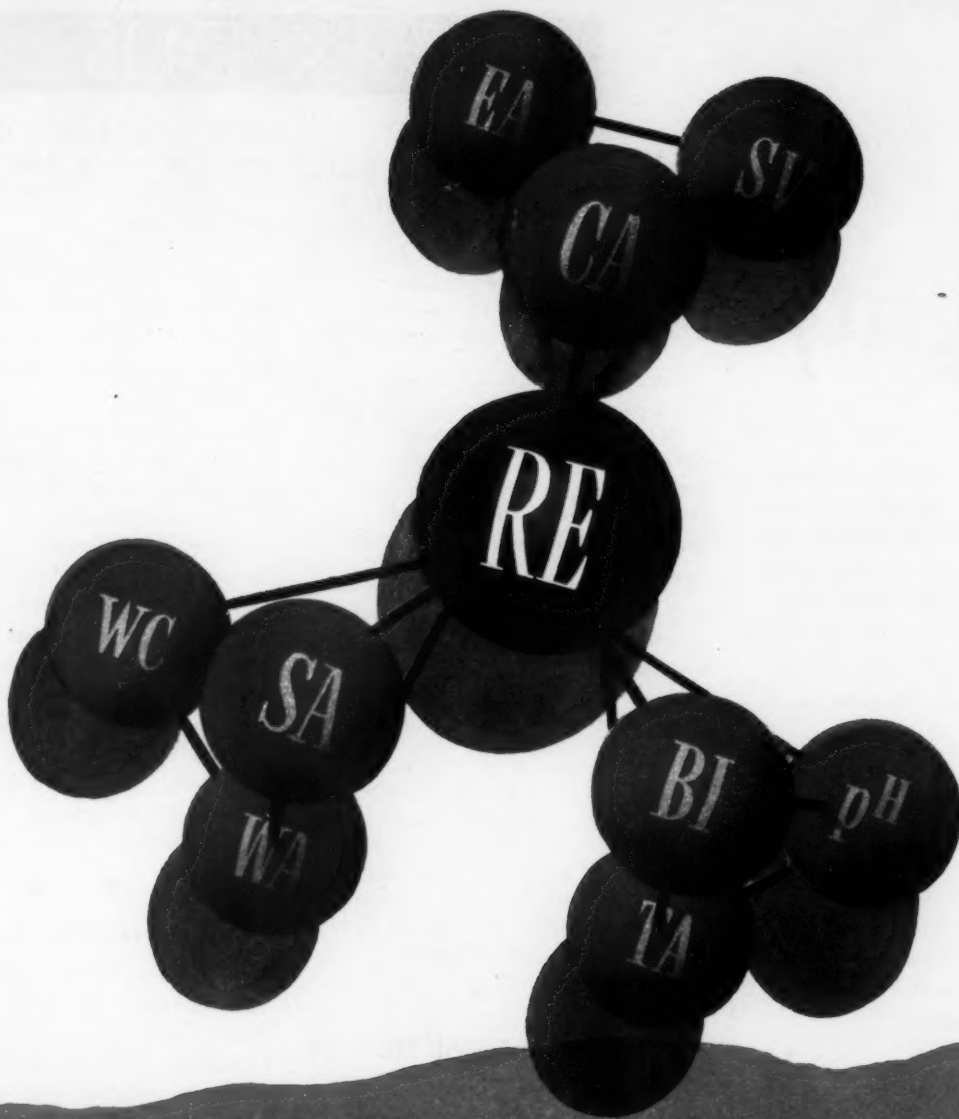
Loveland Uses Them, Too

The board of education at Loveland, Colo., also uses student labor in its junior and senior high school. This is not a war emergency measure but has been going on for years. According to Mrs. Marie M. Curtis, the boys help the janitors sweep, empty wastepaper baskets after school, and they wash windows and perform similar tasks on holidays. They work regularly after school and sometimes on Saturdays. "We pay them \$25 a month," says Mrs. Curtis.

Safety Above All

There is danger, because of manpower shortage, that safety inspections and checks-ups may be overlooked, also that bad spots throughout the building may not be cared for as promptly as formerly.

A. D. Brainard, assistant superintendent of public schools at Muskegon, Mich., was telling us of his safety work. He feels on the whole that there is no more wear and tear on his buildings than can be expected. Every new member of the staff is trained in safety precautions. Too, each building is checked at regular intervals by the superintendent of buildings and grounds as well as by inspectors from the fire department. All danger spots, such as broken stair treads, are reported and repaired immediately. Finally, the student body, through its various organizations, cooperates with the principals and custodial staff in attempting to reduce damage.



THIS IS WHAT HAPPENS WHEN YOU WASH A DISH

Correctly cleaning a dish is no simple operation... these elements must go into action...

Wetting Action (WA) must lower surface and interfacial tensions and allow the cleaning solution to penetrate to surface of the base. Emulsifying Action (EA) must disperse grease and oil as tiny globules, and by suspension prevent re-deposition. Saponifying Value (SV) must convert organic fats and oils into soluble soaps, and Solvent Action (SA) put soils into solution. Colloidal Activity (CA) must disperse solid soils into minute particles which may then be easily removed. Water Conditioning (WC) removes or controls the elements which cause water hardness.

Correct Buffer Index (BI) assures ability to absorb either alkaline or acid soil, thus prolonging efficiency of the solution. Proper pH assures the correct measure of energy of alkalinity and Total Alkalinity (TA) must supply maximum active cleaning energy.

In formulating a cleaning compound, therefore, it is obvious that no one factor is a magic key to all problems. The answer is in determining the relative value of all these factors as they apply to your problem.

Putting these factors into correct balance is a responsibility you can entrust to Turco chemists—a responsibility for which their two decades of Research and Experience (RE) have well qualified them. Take your problem to Turco.

For a fuller explanation of these vital factors, write for Turco's Booklet on your firm letterhead, please.



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Our lines are still as varied as war-time manufacture permits, always fairly priced.

In every transaction Eberhard Faber endeavors to live up to its responsibilities of service to the nation's schools and to those who manage school affairs.



THE OLDEST PENCIL FACTORY IN AMERICA

CHALK DUST

CHRISTMAS CANTO

Now comes the Christmas season, the climax of the year, when the kids are filled with cookies, candy, carols and Christmas cheer; when the school-rooms bloom with holly and parked siblings overflow and the janitors swear merrily as to their work they go.

Can't you sense the Christmas echoes which come ringing through the years, when the outbursts from the music room assault your weary ears? Don't your eyes light up with wonder at every homeroom tree, as the overloaded fuses pop a merry symphony?

The wild confusion multiplies with every passing day and the classes are depleted for the yearly Christmas play. The harassed teachers grimly nod with faces all agleam, while in their hearts forbearance and mayhem reign supreme.

Some school folks like Commencement with its fuss and feathers, too. Some folks prefer the football months with kids all black and blue. But give me cold December, despite its sleet and slosh, for December time means Christmas and I love it all, by gosh!

LESSONS IN NATURAL HISTORY

Santa Claus

SANTA CLAUS, according to the particular person with whom you may be talking at the moment, is pictured as a jolly old elf; a pipe-smoking, heavy-drinking old man inclined to gaudy dress; a chastiser of naughty moppets, or an antedated "has been."

All these selfsame descriptions are applied from time to time with equal vigor to every school administrator. As a matter of speculation, it may sometimes be wondered why either Santa or the superintendent wanted his particular job in the first place and why he continues to hold on when he could earn a better living as a manager of a fish market.

In many other ways the school administrator and Claus have much in common. They both must know the latest patter in child psychology, keep a weather eye on the supply budget and maintain a reasonably good press without hiring a public relations director. Too, they must be skilled in transportation problems. Santa must know how to keep a worn-out bus running in case of a breakdown in deliveries

and the school head, in the more progressive schools at least, must know how to shoe a reindeer according to the fifth grade project-curriculum.

Generally speaking, Santa is allowed somewhat more latitude in his personal behavior than is the school superintendent. If Santa's nose is unduly red, the more charitable people allow for frostbite, but when a superintendent gets a red nose there are no charitable people. Santa is permitted to spank bad little boys but the school boss has to hire a large corps of psychiatrists and a guidance teacher in order to get the same results. When Santa gets his tummy full, he can hike back to the North Pole to recuperate whereas the superintendent has to stick around to attend a meeting of the historical society.

Throughout his life, Santa has to give and give and give. What with local charity drives and dues to sundry community groups, so does a school superintendent.

A Present for Teacher

YOU, too, teacher, participate wondrously in the gifts of the Magi which came to the world the first Christmas time. Pure, shining gold comes to you in that grubby dime which, having been hoarded carefully, is brought from home to pool in some silly present for your delight. Fragrant beyond words are that frankincense and myrrh which are distilled in cheap perfumery bottles discriminatingly purchased from the 5 and 10 Cent Store and the fragrance thereof is enhanced by the incense which hangs over the Christmas tree, whether dragged through the woods with willing hands or purchased in pennies from the corner grocery. The gold is multiplied a millionfold by the light in the eyes of a child as, with his friends, he sings his first Christmas carol. Rich, indeed, is the teacher as she receives and gives.

Note

As a speaker much in demand by parent-teacher associations, it is my well-founded opinion that 99 per cent of the parents of America are women while the remaining 1 per cent are chauffeurs.

F. M. [Signature]

The NATION'S SCHOOLS

AUDIO-EDUCATION

helps good teachers
do an even better job!

For audio-education places at the teacher's command an additional attention-getting, interest-arousing stimulus of the greatest potency. While its full possibilities have, as yet, been barely tapped, so much of value has already been established that schools in all parts of the country are now using radio and phonograph as teaching aids in such subjects as social science, literature, foreign languages, music, physical education, and many others.



Audio-education facilitates both the teaching and the learning processes. Experienced educators believe it will prove one of the outstanding post-war educational tools, and are vigorously appraising its adaptability to their specific needs. To learn how audio-education can serve you, look in the classified section of your telephone directory for the name and address of your local Stromberg-Carlson Sound Equipment distributor, or write to Sound Equipment Division, Stromberg-Carlson Company, Department 65, 100 Carlson Road, Rochester 3, N.Y.



While now obtainable only under priorities, at war's end Stromberg-Carlson sound equipment will bring the best in audio-education to the schools of America. In sound equipment, as in radio, "There is nothing finer than a Stromberg-Carlson!"

STROMBERG-CARLSON



STRAIGHT-LINE COMMUNICATION

SAVES MANPOWER • SPEEDS THE WORK TO VICTORY

NEWS IN REVIEW

Views on Military Training

The commission on educational reconstruction of the American Federation of Teachers took action recently favoring an adequate program of national defense but opposing any hasty or ill-considered action to set up compulsory military training for youth in the postwar world.

In a communication to President Roosevelt, the commission pointed out that the requirements of national defense following the war will depend on the character of international as well as national developments.

The national commission on Christian higher education of the Association of American Colleges, representing 426 institutions, has gone on record as deeming inadvisable the drafting of a long-range peace-time program for either national service or compulsory military training during the stress of the war. It resolved that members of Congress be urged not to pass a national service act or take any further legislative action on the matter of compulsory military training until after the war is over.

The commission argues that the present Selective Service Act will be effective for six months after the duration of the

war; that millions of men and women in active service have a right to a voice on such an important change in national policy, and that only after the war is over and the nature of the peace is more clearly indicated will it be possible to establish wise policies looking toward national defense and the peace.

An assembly of Catholic archbishops and bishops at an annual conference in Washington, D. C., recently went on record against passage of legislation providing for compulsory military training until after the war, when a clearer picture can be had of the international situation and top military men now in action can express an opinion.

Advocates Military Training

The Chamber of Commerce of the United States announced November 6 that its member organizations had adopted three declarations of policy on peace-time compulsory universal military training. These declarations approved by substantial majorities are:

1. The United States should adopt a policy of universal military training for young men in peace time.
2. The schedule of military training should be flexible enough to assure min-

imum dislocation in the educational and business life of young men.

3. Upon completion of the required military training, trainees who do not enlist in the regular military organizations shall be enrolled in reserve components.

New School Commission Formed

The formation of a new Commission on Educational Reconstruction sponsored by the American Federation of Teachers has been announced by the secretary-treasurer of that organization. Floyd Reeves, professor of education, University of Chicago, will serve as chairman. A vigorous program of action in relation to crucial educational problems, which will become increasingly serious after the war, is planned by the commission.

Education and Economic Prosperity

For several months the committee on education of the U. S. Chamber of Commerce has been engaged in research to ascertain whether there is a direct relationship between the economic status and the educational level throughout the United States.

Its conclusions, in brief, are that education is an essential instrument through which commerce, industry and agriculture can be expanded in rising degree; that the cost of education is an investment that citizens and business can well afford in increased measure; that mere technical education is not enough. Cultural education must accompany it.

A report made to the committee by Dr. Harold F. Clarke, professor in charge of educational economics, Columbia University, based on his study of 50 countries, their resources, potentialities, educational systems and standards of living, shows that in any country with a high income the people have a high level of education and great technical skill, regardless of the fact that it may be relatively poor in natural resources. The more education increases, the higher the income rises, but any country that relies primarily on human power will have a low income. As power from coal, electricity and oil is used in increasing amounts, the income tends to rise.

Discussion of Social Security

The National Planning Association, in answer to the need for a better general understanding of the problem of social security, has issued a "Discussion and Study Outline of Social Security." Dr. Eveline M. Burns, a recognized authority, is the author. It is intended to stimulate and facilitate the study and discussion of social security by groups of all kinds throughout the country.

A unique feature of the Study Outline is its recommendation that one of the best sources of information and clarification through discussion is consultation

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DEVOPAKE saves them. Yes... it covers most *any* interior wall surface in *just one coat!* and it *lasts* because its *oil-base* protects—makes it stand repeated wash downs.

For complete guaranteed satisfaction—for money saved—specify DEVOPAKE.
Be patient with your Devoe Agent if he is temporarily out of popular Devopake. War needs come first.

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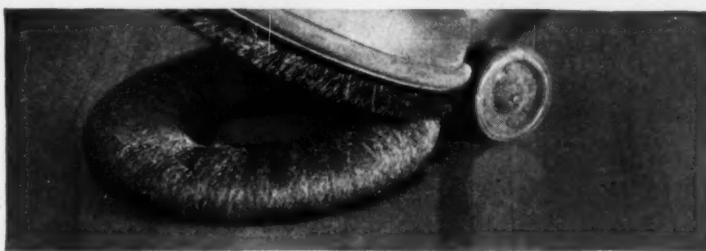
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SUN RAY STEEL WOOL HAS BEEN USED HERE

You get a "mighty smooth" finish on any surface—dance floor, office floor, furniture or woodwork—when you use Sun Ray Steel Wool. You get uniformly excellent results whether you work with wood, metal, pottery or other materials.

With help shortage still acute Sun Ray Woolers are keeping a gloss on millions of square feet of flooring in offices, schools, hospitals, and institutions. The endurance, controllability, and flexibility of the steel wool in these woolers give each strand the proper "bite."



Sun Ray Woolers are easy to apply to any disc type floor machine. Simply tilt machine and wheel to position over wooler, allowing brush to rest centrally on pad. These woolers never roll up or "bunch" or interfere in any way with the smooth operation of the floor machine.



Sun Ray Layer Built Pads are big, handy to work with, and exceptionally economical. When one layer is used it can be folded back exposing a fresh surface.



Craftsmen prefer these pads because they are made from long strands of precision-cut steel wool arranged parallel, insuring faster cleaning and polishing.



The Sun Ray Wooler attached to brush . . . ready for the hardest polishing job. Their use insures a smoother finish on any waxed floor surface. These woolers also aid in doing away, to a remarkable degree, with the slippery condition usually associated with waxed floors.



Sun Ray Layer Built Pads provide the highest quality steel wool in its most convenient form. They are yielding, and flexible and work perfectly on curves and uneven surfaces. They are especially fine for cleaning kitchen utensils.

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with local leaders in business, labor, government and administrators of public and private welfare programs in the community.

The Study Outline is divided into two parts, the first presenting five basic issues and the second, four specific proposals. Each section is a unit in itself, including relevant factual questions, questions of judgment and opinion, suggestions for finding the answers by group discussion and reading references. The bulletin can be obtained for 15 cents from 800 Twenty-First Street, N.W., Washington 6, D. C.

School Film Will Be Televised

The National Broadcasting Company has asked the National School Service Institute for its permission to use "Pop Rings the Bell" for a television broadcast. The broadcasting date will be announced later.

Now It's Machine-Made Sandwiches

Three employees of the board of education in New York City—a custodian and two shop maintenance men—have perfected an electrically powered machine that will make 3500 bread-and-butter sandwiches an hour, depositing the desired amount of butter, namely, one third of an ounce, on the bread. Five hundred of the city's schools may soon have their sandwiches made by the machine which was to be installed at the department of welfare central kitchen in Long Island City, where school lunches are prepared. At present 90 women work from 6 a.m. to 10 a.m. daily making 22,500 sandwiches an hour.

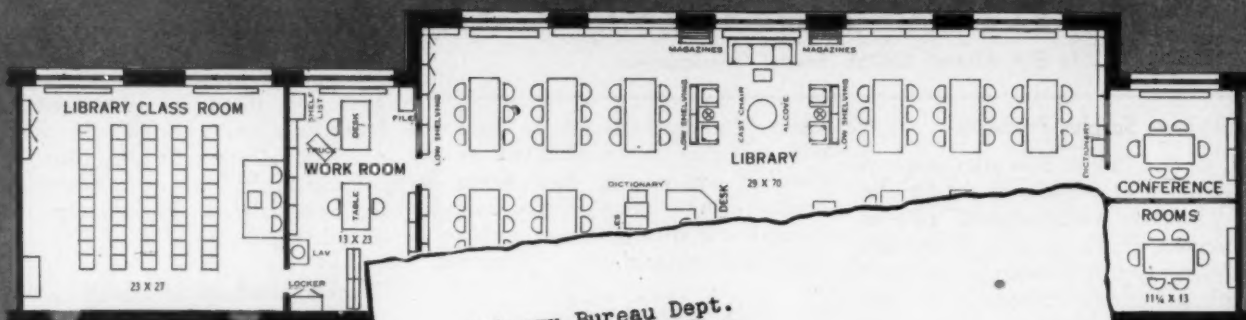
Teachers Back N.E.A. Investigation

The Chicago Teachers Union, representing more than 60 per cent of the public school staff of that city, has gone on record as favoring the current investigation of the Chicago schools by the N.E.A. Ira S. Turley, union president, has offered his personal cooperation and has placed the union's resources at the disposal of the investigators. First steps in the investigation are now under way.

Smaller Classes for Languages

Experience with Army speed-up methods of language training has hastened educational trends under way before the war but has introduced little that is actually new, according to heads of the three modern foreign language departments at the University of Illinois.

For some time the university has tried to limit sections in language study to 25 students. The language department heads have recommended that the next biennial budget provide sufficient instructors to reduce class sections to a minimum of 20 students. This will make possible the increased use of conversation in teaching.



"Planning the school Library"

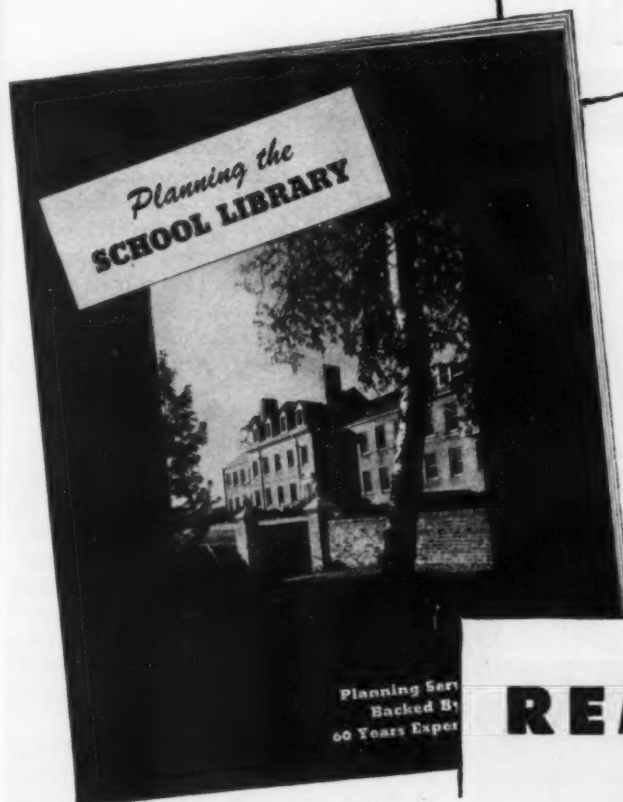
Library Bureau Dept.
Remington Rand, Inc.
465 Washington Street
Buffalo 5, New York

Gentlemen:

We are beginning to make plans for a new high school building as a postwar project, with provision for an enrollment of 800 to 1000 pupils. Several of my friends who have had experience on similar projects suggest that I get in touch with you.

Can you send me typical plans of high school libraries and any other material that would assist us in making the library in our proposed school as attractive and efficient as possible?

Very truly yours,
Walter N. Brown
Walter N. Brown
Principal



The answers to the questions raised in such letters as the above are found in "Planning the School Library." Just off the press, this 20-page booklet has been prepared as a timely and authoritative handbook on a vital phase of school planning. Typical floor plans and numerous illustrations of modern school libraries, supplemented by brief discussions of accepted practices, combine to make this a "must" for the school planning official and librarian. Send for your free copy today.

LIBRARY BUREAU DEPARTMENT
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Buffalo 5, New York

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WASHINGTON NEWS

By EVA ADAMS CROSS, Special Correspondent

Proposals on Surplus Property

The U. S. Office of Education committee appointed to work with the Surplus War Property Administration met in Washington, D. C., recently to consider suggestions and recommendations from educational groups regarding the disposal of surplus properties to educational institutions and to formulate proposals for submission to the Surplus Property

Board. The proposals will be concerned with the plan to be followed by the states in determining their needs for surplus property and with procedures for the equitable distribution of such property to institutions eligible to receive it.

V-12 Training Program

No trainees from civil life or from the service will enter the Navy V-12 college

program for the term starting March 1, 1945, the Navy Department announced October 15. While no civilians have been selected for the term that started November 1, approximately 1000 enlisted men from the ranks have been taken. Students already enrolled in this program in colleges and universities under contract to the Navy will continue training as scheduled. There are at present 69,000 trainees.

Teacher Shortage Still Exists

There is still a tremendous teacher shortage. Trends indicate that 75 per cent more emergency permits will be issued to underqualified teachers this year than were issued last year, according to the U. S. Office of Education. In 1943-44 a total of 69,423 such permits was issued. The number of prospective teachers enrolled in teacher education courses has decreased by more than half since the beginning of the war.

New Periodical From Washington

Fred J. Kelly, chief of the division of higher education, U. S. Office of Education, has announced the publication, beginning early in 1945, of a semimonthly periodical, entitled *Higher Education*. It will be distributed without charge to colleges and universities. Its purpose will be to report the activities of the U. S. Office of Education and other government agencies relating to higher education. Some space will be devoted to developments in colleges and universities.

The division of higher education is also preparing a 64 page bulletin presenting a roundup of postwar higher education activities.

Go-to-School Drive Effective

An informal spot survey of high school registration indicates that the national go-to-school drive conducted during August, September and October has checked the downward trend in enrollment. Some cities report an actual increase in enrollment. School officials who submitted statistics were unanimous in their belief that the drive was responsible for the improvement in school attendance.

Japanese-American Students

Nearly 3000 Japanese-American students are enrolled in 550 American institutions of higher learning in 46 states, the War Relocation Authority, Department of the Interior, has announced. Except for 200 Nisei in colleges elsewhere, Japanese-American students were enrolled in 74 colleges and universities in California, Oregon and Washington prior to December 7, 1941.

W.R.A. provides no funds to aid evacuee students but various church groups, working with the National Japanese-

To reduce floor maintenance time

...DO THIS



...to SAVE THIS

SCRUBBING costs shrink when Neo-Shine or Weatherall protect floors.

Here's why. Both Neo-Shine and Weatherall provide a more durable, smoother wax film that resists wear and dirt. Thus, they remain bright longer and require less maintenance than the average self-shining wax.

How do these waxes differ? Neo-Shine is the *Economy Wax*—the perfect wax for general use. Its unusually high wax content gives it greater resistance to wear—makes it go further—last longer. Weatherall, the *Water-Resisting Wax* is especially made to withstand the continuous wet-mopping of heavy-traffic areas. Both Waxes are safe to use on any floor.

Use these higher quality waxes on

your floors. They save not only money and labor, but also fine flooring.



THE HUNTINGTON LABORATORIES INC

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Before you select your *post-war* Sound Projectors...



Consider These Facts:

1. An efficient 16 mm. sound-on-film projector will be the heart of your post-war visual aid program. Such a machine is a precision instrument that must possess ruggedness. It must be easy to operate. It must be soundly designed. It must be able to deliver effective tone quality and clear illumination continuously under amateur operation.

2. It requires years of service under actual operating conditions to develop a sound projector to meet these stiff requirements.

3. Ampro 16 mm. sound projectors served thousands of schools and universities for many years before the war.

4. During the war—Ampro projectors were tested and approved as equipment for the U. S. armed forces on fighting fronts the world over.

5. This vast background of experience is your assurance that Ampro projectors can best meet the needs of your school program.

To keep in touch with newest developments in motion picture projection, write today for latest information on Ampro 8 mm. silent and 16 mm. silent and sound projectors.

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American Student Relocation Council, have donated in the last two years more than \$120,000 toward tuition scholarships. Many of these students work for their board and room. The council, composed of university and college presidents, is headed by John W. Nason of Swarthmore College. Robert Gordon Sproul of the University of California was one of its original sponsors.

Minimum Age for Employment

A statutory 16 year minimum age standard for employment of children in any occupation during school hours and in manufacturing establishments at any

time is being put forward by the Children's Bureau. Leaflets urging community support of legislative action toward that end have been sent to states having legislative sessions in 1945. Katharine F. Lenroot, chief of the Children's Bureau, considers the establishment of such a standard a major objective in the transition period from war to peace.

Fifteen states have already adopted child labor laws that meet or approximate the recommended 16 year minimum; in 29 states the minimum is 14 years; in four states, 15 years. Of the 15 states having legislation approximating the recommended standard, New

York and New Jersey meet it and the other 13 are making progress toward meeting it. The latter group includes Connecticut, Florida, Louisiana, Massachusetts, Montana, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, West Virginia and Wisconsin.

In this connection the Navy Department as long ago as last June issued a circular letter providing that minors under 16, except noncivil service employees working in Ship's Service, shall not be employed in naval establishments.

Not All Apply for Training

Of 184,000 disabled veterans who have been notified of eligibility to vocational rehabilitation, only 34,000 have applied, the Veterans Administration announced recently. This training program for the disabled has been getting off to a slow start, the administration says, because of the excellent employment opportunities available to veterans in war production industries. Up to October 1, 12,000 applicants for education or training under the "G. I. Bill of Rights" have been declared eligible and more than 2000 have entered educational institutions.

Higher Education Problems

The advisory committee for the study of higher education for the House Committee on Education met November 26 for consideration of the final report on the questionnaires sent out some time ago to approximately 1800 institutions of higher education. A preliminary report had been submitted at the conference in October based on replies from 1000 schools.

This report indicated that the effect of the war has not been evenly distributed among the colleges and universities. Relatively few are in so critical a position that they face the prospect of closing. Most of them have lost faculty members and nearly all of them, men students; a number are in a difficult financial position. Emergency measures have been taken, economies have been practiced in administration and instruction to such a degree that the effectiveness of educational programs has been threatened. A reservoir of deferred needs has been built up.

"How is this situation to be met?" the advisory committee asks.

According to replies received thus far to the questionnaire, most school heads believe that the federal government should provide aid as a temporary policy; some favor federal aid as a permanent policy. Activities for which federal aid is sought, according to the replies, include: research; adult education; teacher preparation and improvement; programs for the improvement of health; liberal arts and science education. Federal grants



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By standardizing on these high-quality, low-priced C.P.P. soaps, you purchase fewer soap types—reduce costs—increase cleaning efficiency!	

DON'T WASTE SOAP Vital materials needed to win the war are used in making soaps.

Before you order your next supply of maintenance soaps, call in a C. P. P. representative and ask

for details and prices. Or, write direct to our Industrial Department at Jersey City 2, N. J.

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are wanted also for scholarships, buildings and permanent equipment and low rate long-term loans to meet war emergency operational deficits.

The difficulties indicated involve more than immediate finance. They involve major problems of readjustment that cannot be met through emergency legislation, such as problems of personnel, physical equipment and financial structure.

The work of the advisory committee is more than a study of specific ways to alleviate the financial situation in institutions affected by the war. Long-range problems must be considered and an

evaluation must be made of the rôle of the federal government in relation to state and local responsibility in the field of education in postwar America.

Education Level of Soldiers

The median level of education of American soldiers in this war is the second year of high school as compared with the sixth grade education in the last war, the Office of War Information reports.

In this war, 23.3 per cent of the soldiers had completed four years of high school, whereas only 3.5 per cent of the soldiers in the last war had done so.

The two largest groups in both wars, however, included those who had completed no more than five to eight years of grade school. The percentage was 27.4 per cent in this war, 55.5 per cent in the last war.

The number of persons who have completed no more than the first four years of grammar school, in this war, amounted to 3.5 per cent, as compared with 24.4 per cent in the last war. No comparison of the rates for rejection for illiteracy can be made between this war and the last since in both cases these rejections have been closely associated with other causes for rejection and comparable statistics cannot be obtained.

Four years of college or more had been completed by 3.6 per cent of the soldiers in this war, as compared with 1 per cent in the last war.

International Education

International education is receiving considerable attention in Washington at the moment. The Liaison Committee for International Education met November 20 and 21. This committee is composed of representatives of educational groups in the United States interested in international education. Among subjects discussed were the prospects for obtaining a United Nations Office for Educational and Cultural Reconstruction.

House Resolution 5350, introduced September 14 and referred to the foreign affairs committee, "authorizes the President to detail federal specialists to any country and, acting through the Department of State, to render, with agencies, more effective the relationship of the United States with other countries, in technical, professional and scientific matters."

The National Education Association says that the passage of this bill would extend to other countries the good neighbor policy which the United States is now pursuing with the Central and South American republics. Under the provisions of this act, the N.E.A. continues, "it would be possible for the United States to realize some of the relationships in education among the nations of the world which have a place in the program setting up an international office of education as recommended by the N.E.A. policies commission."

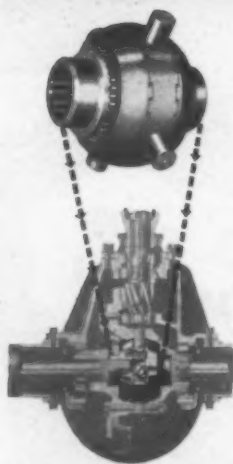
"Spot Authorization" of Septic Tanks

The manufacture of steel septic tanks, metal signs and class "B" coal stokers for civilian consumption was the first approval of civilian production under the recently issued "spot authorization" order of W.P.B. The authorization does not involve any additional labor or new materials. For septic tanks steel will be used by the Johnson Company of Houston, Tex., to make about 900 units each quarter. Some 50 coal stokers will be pro-



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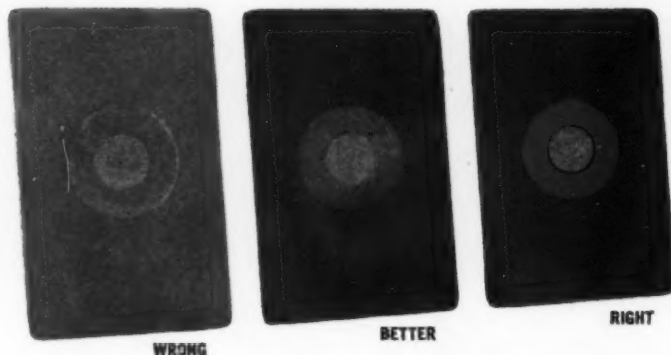
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Wrong: Camouflage is all right in nature—all wrong in industry. Monotone-colored machines cause eye fatigue—millions of man-hours lost.

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A new system of using color to minimize workers' eye fatigue which will interest all teachers in trade or industrial schools.



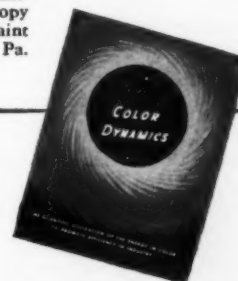
• Any Pittsburgh representative can help you apply Color Dynamics with the aid of a Pittsburgh Color Selector. Selection of correct focal colors is made by placing different color panels behind a Vista Green panel (the color generally recommended for non-critical parts) so color can be observed through a round opening. The test is completed by placing a piece of material being processed, across the opening. The focal color which contrasts best with machine and material—is the correct color to use. The above illustrations show Color Dynamics at work. The last panel illustrates how the use of correct focal color provides proper contrast between material and machine—emphasizing critical parts while Vista Green makes non-critical parts recede.

PERHAPS the simplest way to arrive at an understanding of the Pittsburgh system of Color Dynamics is to think of it as *exactly the opposite of camouflage*. Instead of obscuring and hiding, color becomes an agent charged with the duty of making it easier for workers to see their work.

On machines, color is used to highlight the operating parts so that they stand out—to give a clear contrast between the machine itself and the material being fabricated—to focus the worker's attention on his job. By this means, eye wandering and nervous tension are minimized.

For motorized trucks, cranes and overhead conveyors (which are responsible for many industrial accidents) colors of high visibility are employed. These act as danger signals and are recognized as an important safety factor.

• A free copy of the new book "Color Dynamics" will be mailed to any teacher who sees an opportunity of fitting this system into his courses. You will find this study of the utilization of color energy both stimulating and practical. For your copy write Pittsburgh Plate Glass Co., Paint Div., Dept. NS-12, Pittsburgh 22, Pa.



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Not everyone realizes the fundamental researches which are constantly under way in the American Gas Association's Testing Laboratories and those of equipment manufacturers . . . research which is bound to be to your benefit when you get new equipment.

Right now most of the work of the Laboratories in Cleveland and Los Angeles is of a secret military nature. When that story can be told, it will be a dramatic one. But in the meantime, basic researches are going on to improve the efficiency of Gas cooking and baking. From these great clearing-houses are coming important improvements and refinements which will make post-war Gas ranges, broilers, bake ovens and many specialized appliances for large scale preparation of food even better. Among these advantages will be greater speed, fuel economy and convenience.

It might be a good idea to keep in touch with these

developments because of their effect on your own post-war cooking and baking problems. Your Gas company will be glad to keep you informed.

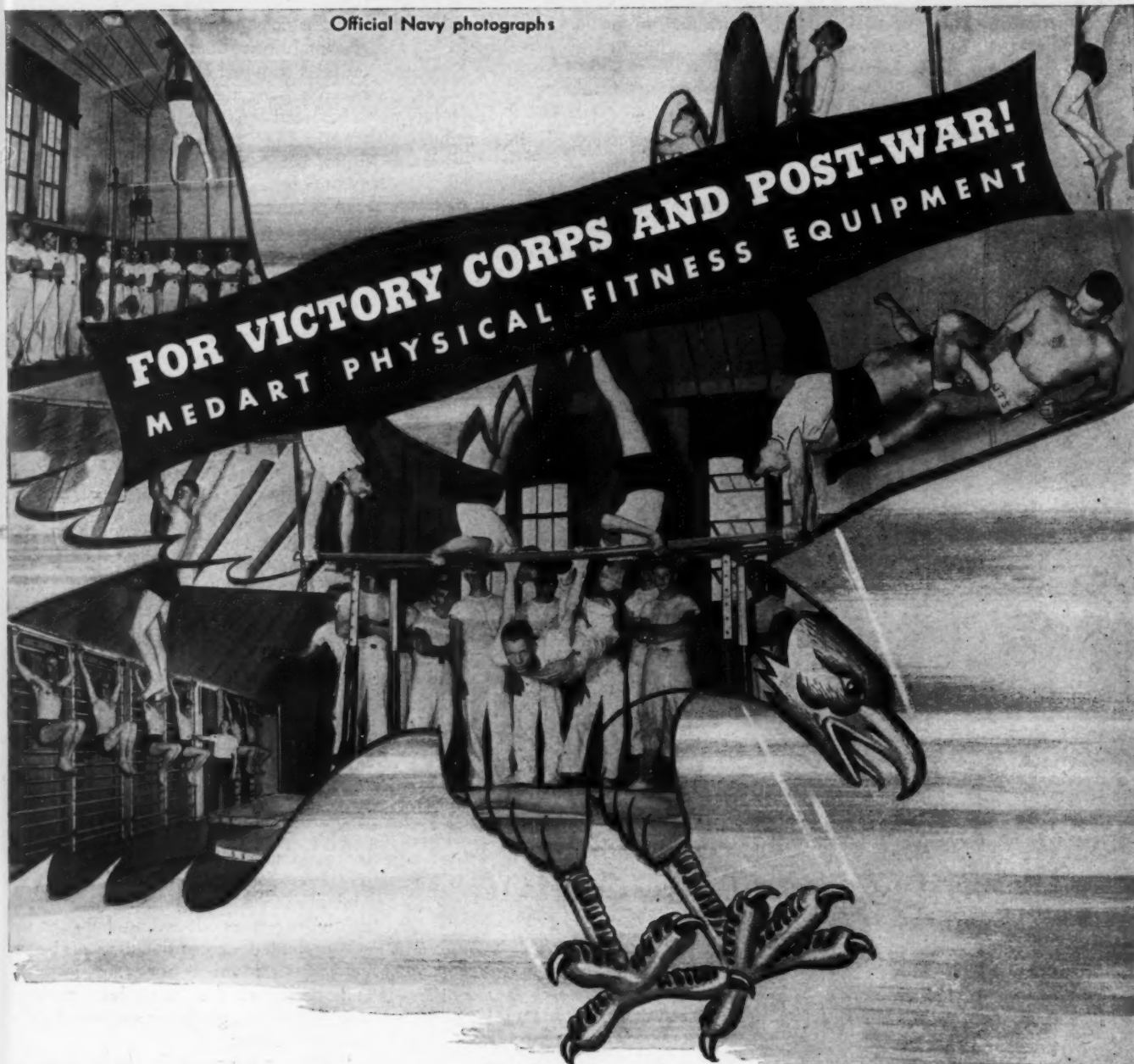
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| * Climbing Poles | * Flying and Traveling Rings | * Springboards |
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| * Parallel Bars | * Basketball Goals | * Mats and Covers |
| * Horizontal Bars | * Volley Ball Standards | * Stall Bar Benches |
| * Stall Bars | * Vaulting Boxes | * Maple Wands |
| | * Indian Clubs and Dumbbells (wood) | |

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ILLUSTRATED MEDART EQUIPMENT BOOKLET

Free 20-page booklet just off the press describes in detail—with vivid illustrations—all types of Medart Physical Fitness apparatus now available for your Victory Corps Program.



TRAINING SUGGESTIONS FOR INSTRUCTORS

Free booklet on "Physical Training," practical suggestions for the instructor by Charles E. Miller, B. Sc., A. M. Gym. Coach University of Nebraska. 72-page book explaining correct uses of gym equipment.

duced the fourth quarter of 1944 and 125 stokers the first and second quarters of 1945 by Heating Assurance Inc. of Spokane.

Domestic Oil Burners

Material has been authorized for the production of 30,000 oil burners of the domestic type during the fourth quarter of 1944 for replacement and hardship cases, W.P.B. announces. Production of oil burners has been prohibited since early 1942. Essential replacements have been made from inventories of manufacturers and dealers. Until L-74 (controlling oil burner production) is

amended, production must be under the "spot authorization" procedure.

Convention Curtailment

The Office of Defense Transportation announced October 27 the continuance of its convention curtailment program. Convention-holding organizations were asked, in view of the continuing heavy war burden on the country's transportation system, to cancel any kind of meeting scheduled before April 1, 1945.

Cotton Goods Will Be Scarce

The shortage of cotton goods will continue for a year or two after Ger-

many is defeated, according to the Office of War Information. The report is based on facts supplied by the W.P.B. and the Foreign Economic Administration.

Included among the critical shortages are sheetings, toweling, poplins, chambrays, denims, shirting coverts and numerous other articles. Women's dresses, men's shirts, children's apparel, underwear, shirts, blouses, bedspreads and work clothing are in tight supply.

Juvenile Delinquency Studied

Children are mainly the product of the environment in which they grow, the Senate subcommittee on war-time health and education declared in a report recently released.

No conclusive evidence was developed that delinquency has greatly increased during the war period but that a serious problem exists, there is no doubt.

Among popular fallacies scouted is the ascribing of delinquency to the neglect of children by working mothers. Women constitute a considerable part of the labor power essential to win the war. It would be a poor service to the country, the report maintains, to insist that these women go back to the kitchen and nursery. The committee believes that the provision of suitable facilities for the care of children during the working hours of parents is the proper answer to the charge of neglect.

The committee recommended that a commission for children and young people be established in the Office of War Mobilization to work through and with existing agencies. It would help set up a coordinated program aimed at better housing and more adequate facilities and personnel for education, medical care, recreation, guidance and social services for children.

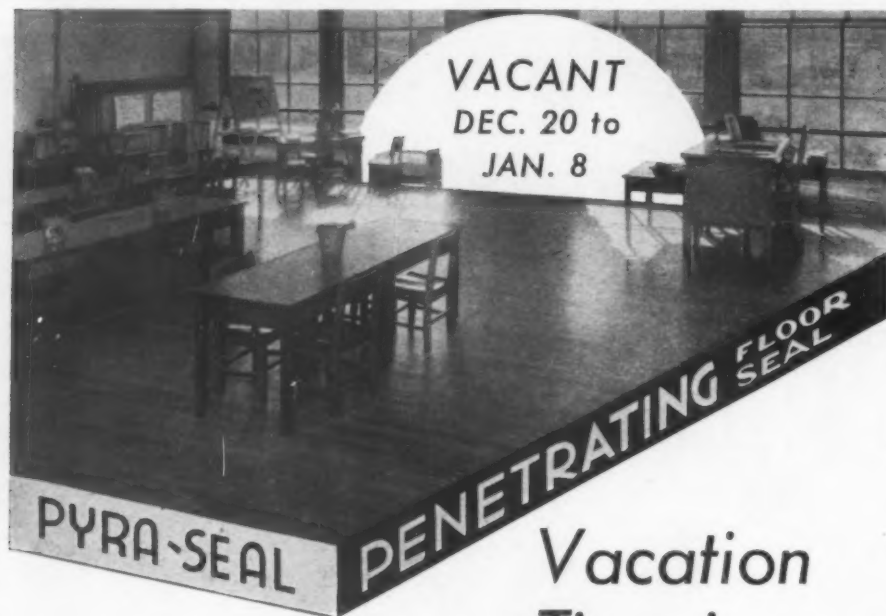
Particular attention should be given to the establishment of child guidance clinics as an integral part of school systems in key cities.

\$500 Capital Additions Possible

Schools will be able to get minor capital additions costing up to \$500 under the provisions of Controlled Materials Plan Regulation 5A amended November 7. The limit previously had been \$100. This liberalization puts schools and other institutions on the same basis as business and industries that have been operating under CMP 5A, insofar as this provision is concerned.

"Lab" Equipment List Reduced

The types of laboratory equipment on List A of L-144 were reduced in number through an amendment October 21. Authorization from W.P.B. (on WPB-1319) is required only for the items of laboratory equipment shown on List A. Only the preference ratings assigned on the



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is a penetrating seal that goes down deep into the pores of the wood and becomes a part of the floor itself. It completely seals the surface of wood to prevent the absorption of moisture, grease, oil and dirt, leaving a smooth, hard, elastic finish capable of withstanding heavy traffic. Because no surface film is left on the floor, it will not scratch, peel or wear off.

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CAN WEAR AWAY A STONE...

... and little noises, constantly dinning in the ears, damage nervous systems and ruin dispositions.

Today's overcrowding and speeded-up classwork produce a far greater volume of noise than ever before. The result is distraction, undue fatigue and a serious slowdown of mental alertness among students and teachers alike.

Leading schools everywhere have ended their noise problem by sound conditioning with Acousti-Celotex.* Now their students can concentrate easier, can hear from wherever they sit. Emotional strain is reduced. The efficiency of overworked staffs is vastly improved.

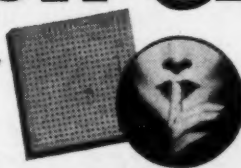
Sound absorbing Acousti-Celotex is the famous perforated fibre tile and most widely used acoustical material. It can be quickly applied without disturbing classwork. It can be repeatedly painted without loss of efficiency.

Prove the benefits of Acousti-Celotex *quiet* by starting with a corridor, assembly room or some other noise source. Talk it over now with the nearby Acousti-Celotex distributor. He is a member of the world's most experienced sound conditioning organization and he *guarantees results*. Get in touch with him today, or write us direct.

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approved applications may be used in purchasing these types of equipment. Substitution of a model different from the one authorized, whether made by the same manufacturer or not, is prohibited.

Types of laboratory equipment still subject to these controls are: analytical balances (sensitivity 1/20 mg. or more sensitive), centrifuges having a value of more than \$80 each, hydrogen ion meters of the electrometric type, metallographs, stereoscopic wide field microscopes, Abbe refractometers, quartz spectrographs, quartz spectrophotometers, infra-red spectrometers and vacuum pumps of one micron or higher.

MEETINGS

Junior College Heads to Meet

The twenty-fifth annual meeting of the American Association of Junior Colleges will be held at the Statler Hotel, St. Louis, February 21 to 23. General sessions will be held on Wednesday, Thursday and Friday. Publicly controlled and privately controlled junior colleges will meet separately Wednesday evening. The annual dinner will be Thursday evening. All sessions will stress the adjustments of junior college

education to conditions after the war.

Marked increase in enrollment in most of the junior colleges of the nation is reported by Walter C. Eells, executive secretary. Less than one sixth of the more than 300 junior colleges reporting have had a decrease in enrollment as opposed to more than three fourths of the colleges reporting at the same time last year. Increases of 50 per cent or more have been reported by 27 institutions.

Many schools, especially those for girls, report capacity enrollments with applicants even being refused admission. In almost 200 coeducational junior colleges, the median percentage of boys was 26. In 17 institutions more than half of the students are boys.

Home Economists' Conference

A group of home economists met in Washington, D. C., the week of November 27. The conference was called by Edna Amidon, chief of division of home economics, U. S. Office of Education, to consider the space and equipment for teaching homemaking in the immediate and postwar periods. Attending were state home economics supervisors, teacher trainers, representatives of college departments of home economics, city supervisors and home management specialists.

POSTWAR EDUCATION

Colleges Plan Aviation Courses

A total of 307 colleges and universities is planning to teach postwar courses in aviation, a Bendix Aviation Corporation survey reveals. Of the 455 institutions responding to the corporation's questionnaire, 237 are now teaching some aspects of aviation and 212 of these are planning to continue or expand their curriculums after the war. Ninety-five additional schools among 140 colleges which do not at present teach aeronautics are planning to establish postwar courses.

Seventy-six institutions say they now have the necessary facilities for a permanent program of aviation education and 160 say they have fairly adequate facilities but will need substantial quantities of usable government-owned aircraft equipment which can be made available to them under the Surplus Disposal Law.

Instruction in Television

Western Reserve University, Cleveland, has announced plans, in cooperation with Case School of Applied Science, for television instruction and the broadcasting of television plays. Instruction, play production and broadcasting will be started as an informal extra-curricular activity, according to Prof. Barclay S. Leathem, head of dramatics at Western Reserve. Arrangements have

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Above: Metal back makes for compactness. Tufts support one another; also prevents splitting, chipping of block, most common causes of brush failure.

Below: Tufts are not just stapled. Long materials are hand drawn, short materials set by hand with waterproof, oilproof cement.

From the standpoint of long life alone, the "Dustless" brush is an exceptional value. Tuft materials are highest grade. No substitutes are used. Tufts are hand drawn or set by hand. They cannot come out or come loose. Metal back prevents splitting of block. Unique adjuster reverses handle with a simple twist, to give brush equal wear on both sides.

But the "Dustless" brush also has other advantages—in economy and performance. It eliminates sweeping compound entirely. It far surpasses ordinary brushes in dust control. It has a metal reservoir which is easily filled with kerosene, or "Arbitrin", a specially prepared sweeping fluid. As the brush sweeps the fluid filters through the center row of tufts, making the best kind of sweeping compound out of dust on the floor. Independent tests by Health Authorities have proved that this method is so efficient that it removes 97 per cent more germ-laden dust from the air than ordinary sweeping methods. For complete information and prices of "Dustless" brushes write direct to factory: Milwaukee Dustless Brush Co., 528 N. 22nd St. Milwaukee 3, Wis.

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Buy sound equipment critically. Include a piano recording in your demonstration. For the piano is the most difficult of all instruments to record without wavering of pitch — something a student identifies immediately as a caricaturing of his voice or music.

Listen carefully to your recording on a Fairchild Portable Recorder. Note how the fundamental tone and each of its overtones are reproduced at exactly the same relative strength as heard in the original sound. And note, too, the complete absence of all wavering of pitch. The Fairchild famed turntable drive is the reason. Excellent mechanical design and precision

manufacture make its performance quiet and positive.

Remember always, the true value of sound equipment as an educational medium for self-criticism of speech, modern language, drama and music depends entirely upon its ability to reproduce the original sound with absolute naturalness.

Obviously, any recording that falls short of naturalness has no place in the classroom — and represents an educational investment of dubious value.

Fairchild Portable Recorder descriptive and priority data are available. Address *New York Office*: 475 - 10th Ave., New York 18; *Plant*: 88-06 Van Wyck Boulevard, Jamaica 1, N. Y.



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been made to broadcast the first play over station WRGB in Schenectady, N. Y.

A studio will be set up on the university campus and equipment for play production will be installed. The object is to initiate students into the television industry which is expected to provide a large amount of postwar employment.

MISCELLANEOUS

A.V.A. Journal Becomes a Monthly

Beginning January 1, the quarterly *A. V. A. Journal and News Bulletin* will

become a monthly publication under the name, *American Vocational Journal*. The Scholastic Corporation, publisher of *Scholastic Magazine*, will supply publishing services making such expansion possible.

"This action is being taken because of the rôle vocational education is destined to play in reconversion and the postwar years," says L. H. Dennis, executive secretary of the American Vocational Association. "We are making our periodical a monthly so as to give professional guidance to our members as they attack reconversion training problems." The A.V.A. will hold a reconversion

vocational training conference in Philadelphia December 6 to 9. More than 200 vocational leaders will participate as speakers or panel members. Training for veterans will dominate many section programs. Representatives of labor, management and the armed forces will join with vocational education leaders in one afternoon session devoted to conversion training.

Community School in New York

The Downtown Community School, 46 Barrow Street, New York City, is a nonprofit organization formed by a group of parents whose children are now being educated under their own supervision in conjunction with prominent educators and welfare workers. Mrs. Ellen Steele Reece, director, characterizes its policy as that of "bridging the gap between the school and the home." It has an enrollment of 60 children, ranging in ages from 6 to 9, and has provided for full or partial scholarships so as to permit children of working parents with limited incomes to attend the school. Eight of these have been made available to children whose fathers are now in the armed forces. The school plans to engage in community activities.

Marines Go to High School

The first semester of an education program unique in the armed forces ended October 20 when 160 Marines completed a 13 week vocational course at the Union

TOMORROW'S PLANS

ARE TODAY'S PROBLEMS

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PLANNING ASSISTANCE

... can help you

School architects, administrators and teachers, aware of postwar educational imperatives, are basing school building designs on tomorrow's needs. In planning special rooms and selecting vocational and laboratory equipment Sheldon can be of unusual assistance. Sheldon will also assist you in compiling budget estimates and writing specifications. Write today—request Sheldon Planning Assistance. Without obligating you in any way Sheldon Engineers will call and discuss your problems, ideas and plans.



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Coming Meetings

REGIONAL MEETINGS

January

American Association of School Administrators: 9-11, San Francisco.

February

American Association of School Administrators: 12-14, Birmingham, Ala.

American Association of School Administrators: 19-21, Chicago.

American Association of School Administrators: 27-March 1, Denver.

American Education Fellowship: 2, 3—New York City; 23, 24—Chicago.

March

American Association of School Administrators: 5-7, New York City.

STATE AND NATIONAL MEETINGS

December 4-8—National Recreation Congress, Atlantic City, N. J.

December 8-9—American Vocational Association Reconversion Vocational Training Conference, Philadelphia.

December 27-29—Illinois Education Association, Springfield.

December 27-29—Pennsylvania State Education Association, Harrisburg.

1945

February 16, 17—Oklahoma Education Association, Tulsa.

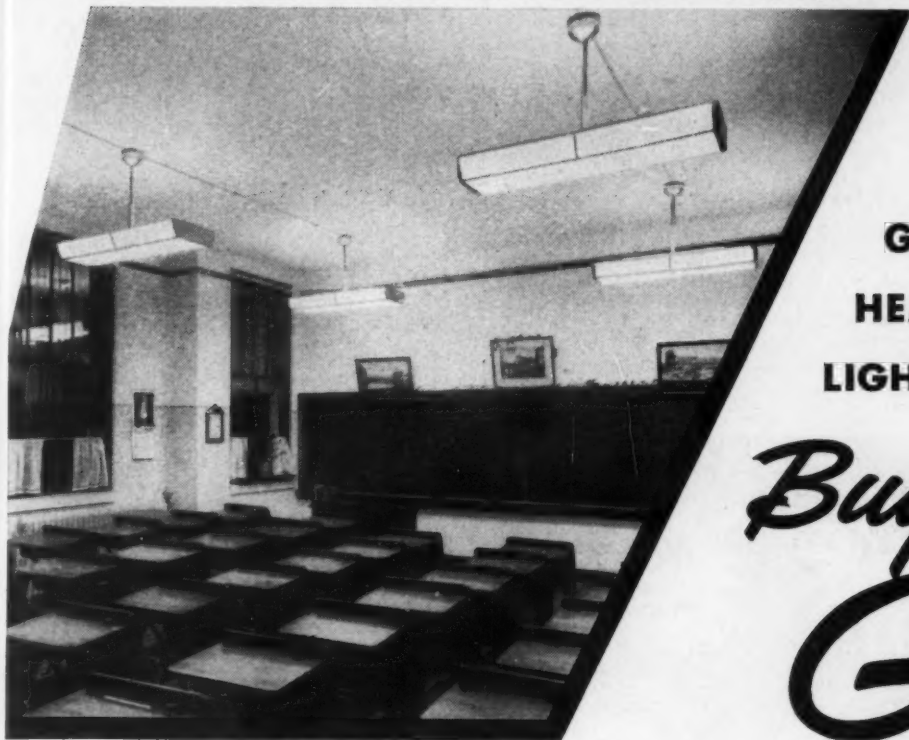
February 21-23—American Association of Junior Colleges, St. Louis.

April 13, 14—Idaho Education Association, Boise.

April 21—Massachusetts Teachers Federation, Boston.

* Meeting of delegate assembly or other representative body only.


G-E fluorescent lamps can help provide smooth, shadowless light in classrooms to make it easier for pupils to study without eyestrain. Plan this kind of lighting now!



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HEART OF ANY GOOD
LIGHTING INSTALLATION**

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Here's News! **G-E MAZDA Fluorescent
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YES... now you can buy as many G-E Mazda fluorescent lamps as you need to replace blackened and burned out lamps. Today, your lighting can be brought to peak performance with new, low-cost, long-lasting G-E Mazda fluorescent lamps. When you make replacements, look for the G-E monogram. Remember... it is the constant aim of General Electric research to make lamps bearing this mark ...

Stay Brighter Longer



G-E MAZDA LAMPS

GENERAL  ELECTRIC

Hear the G-E radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday 6:45 p. m. EWT, CBS.

BUY MORE WAR BONDS

High School, Klamath Falls, Ore. The classes in typing, welding, machine shop and sheet metal work, drafting and radio were for the purpose of fitting Marine combat veterans for advanced service in the corps and for a trade in civilian life. The men attended school half days along with regular pupils. They received no scholastic credit. Arnold Gralapp, superintendent of the county schools, cooperated with Marine Corps officers in inaugurating the course.

Study of American Civilization

Western Reserve University has inaugurated a program of study of American

civilization and will award a master's degree in that subject. Fellowships are available for research assistants who take this work, seven having been selected for the first studies. Each is to study "living history," doing original research into various phases of American life, slanting his work toward art, history, literature or sociology as he likes. Source materials will not be limited to libraries but may include interviews with living persons and study of the institutions and activities of a community.

Prof. Leslie Collins of Lincoln University, for example, who is studying Negro relations, will accompany Paul

Robeson on his tour with "Othello" and attend meetings at which Robeson speaks. He may then accompany Katherine Dunham, the Negro dancer, and Marion Anderson on their itineraries, studying the effect of their art, careers and personalities upon Negro opinion and the views of Whites toward Negroes.

Omaha Board Moves

The Omaha board of education has moved its administrative offices from the City Hall to the so-called "Joslyn Castle," a landmark in that city and once the home of Omaha's wealthiest citizen. It is surrounded by 5¼ acres of grounds which are planted with flower beds and 48 varieties of trees. The castle also houses the newly established Sarah H. Joslyn Museum for Children, designed to stimulate pupils' interest in the various subjects of the school curriculum. Visits to the museum will be a definite part of the instructional program.

Institute and Schools Cooperate

Franklin Institute, Philadelphia, devoted to the study and promotion of the



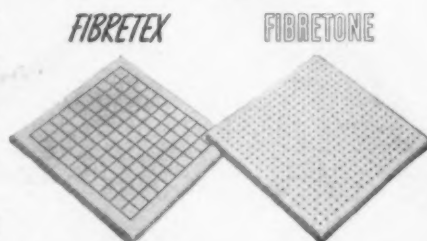
TO INSURE CONCENTRATION IN CLASSROOMS — Kill Noise at its Source!

A WELL-KNOWN SCIENTIST tells us that noise, even when we are not outwardly conscious of it, will make our muscles more tense, blood pressure higher. This means more fatigue, less concentration. That's why noise control becomes so important in today's overcrowded schools.

Today it costs less than you think to enjoy the benefits of scientific acoustical treatment, not only in the noise centers of your school, but in the classrooms, too. For Johns-Manville has recently developed two highly efficient, extremely economical acoustical materials.

Known as Fibretex and Fibretone, they come in unusually attractive 12"

square panels, as illustrated. They are factory-painted, ready for instant use. Cost little to maintain—can be painted without lessening their acoustical properties. Investigate! Send for illustrated brochure on "Sound Control," address: Johns-Manville, 22 East 40th Street, New York 16, New York.



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PLANNING FOR EDUCATION IN KENTUCKY. By Maurice F. Seay and Leonard E. Meece. Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Lexington.

GUIDING GROWTH IN CHRISTIAN SOCIAL LIVING. Volume I. By Sister Mary Joan, O.P., and Sister Mary Nona, O.P. Commission on American Citizenship, The Catholic University of America. Washington, D. C.: The Catholic University of America Press.

THE GUIDANCE OF LEARNING ACTIVITIES. By William H. Burton. New York: D. Appleton-Century Company.

FREEDOM THROUGH EDUCATION. By John D. Redden and Francis A. Ryan. The Bruce Publishing Company, 540 N. Milwaukee St., Milwaukee.

YOUR SCHOOL YOUR CHILDREN. By Mary Syrk. New York City 16: L. B. Fischer Publishing Corp., 381 Fourth Avenue.

THE FUTURE OF EDUCATION. By Porter Sargent. Boston: Porter Sargent, 11 Beacon Street.

SIGNIFICANT ASPECTS OF AMERICAN LIFE AND POSTWAR EDUCATION. Vol. VII. Edited by William C. Reavis. Proceedings of the Thirteenth Annual Conference for Administrative Officers of Public and Private Schools, 1944. Chicago: The University of Chicago.

THE DEVELOPMENT OF HIGHER EDUCATION IN MEXICO. By George I. Sanchez. New York: King's Crown Press, Morningside Heights.

ETHICS AND SOCIAL POLICY. By Wayne A. R. Leys. New York: Prentice-Hall, Inc. 1941.

A PHILOSOPHY OF RELIGION. By Edgar S. Brightman. New York: Prentice-Hall, Inc.

PROPOSED STANDARDS FOR SCHOOLHOUSE CONSTRUCTION. Prepared by the West Virginia Council on Schoolhouse Construction. State Department of Education, Charleston, W. Va.

INDEX

of DELTA CRAFT PUBLICATIONS

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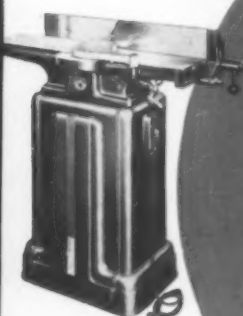


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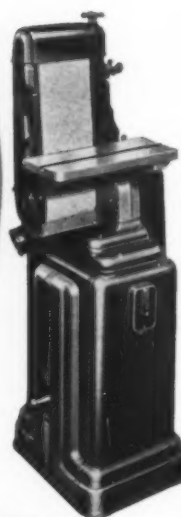
Certain tools are available to schools under automatic priorities (CMP Regulation 5a). Consult Your Delta Distributor



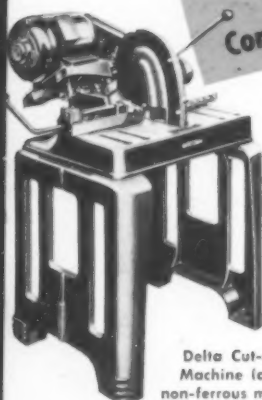
Delta 14" Band Saw (wood-cutting or metal-cutting)



Delta 17" Drill Press (for metal, wood or plastics)



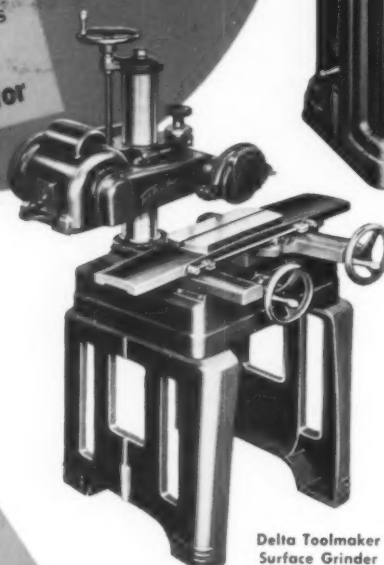
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THE LITTLE

SCHOOLHOUSE

Grows up



One Reason

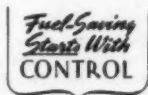
TEMPERATURE CONTROL BY JOHNSON ASSURES COMFORT AND FUEL ECONOMY

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Though the Johnson organization is playing its part in helping win the war by manufacturing accessories for airplanes and for other imple-

ments of war, experienced Johnson engineers and mechanics are available for servicing present temperature control installations and for designing and installing new ones.

If you have a current temperature control problem or if you are thinking now of the future in terms of getting the best that engineering skill and inventive genius can give you . . . get in touch with the nearest Johnson office—branches in all principal cities. There is no obligation, of course.



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mechanic arts and applied sciences, is cooperating with the Philadelphia board of education in correlating its facilities with the school curriculum.

Two radio programs—"Science Is Fun," designed for elementary grades, and "Great Moments in Science," for junior and senior high school pupils—are broadcast weekly directly to classrooms by the institute's department of museum education and the board of education has assigned a teacher to conduct tours of the museum and lecture before faculties and student bodies in the schools. Her work is directed toward cooperation with teachers before, during and after their classes visit the institute. Teachers are supplied with manuals of supplementary study and activities.

Organizes After-School Athletic Clubs

The Public Schools Athletic League and the girls' branch of the league are cooperating with principals of elementary schools, junior, senior and vocational high schools in New York City in the organization of after-school athletic clubs for pupils. Those registering can take part in all activities.

Regularly assigned teachers who volunteer to conduct this activity for thirty weeks, serving at least one hour a week, are eligible for professional improvement credit upon certification by the school.

FINANCE

State Funds for School Plans

According to recent legislation in California, cities or counties may now assign part or all of funds allocated to them for the preparation of plans for public work projects and the acquisition of property for postwar construction projects to school districts. Cities or counties may also engage jointly in the undertaking of a postwar construction activity.

PUBLICATIONS

South Africa on Service. A pictorial record of the Union of South Africa's work on the home front from 1939 to 1943 contributing to the United Nations' war effort, with a foreword by Prime Minister Smuts and the Director-General of Supplies, Dr. H. J. van der Bijl. Washington 8, D. C.: South African Information Office, 3101 Massachusetts Avenue.

School Lunch Management. A booklet on the organization of the school lunchroom, type of meals to serve and problems of lunchrooms in different sections of the country. Helpful for those beginning a lunch program and for use as a check for cafeterias now in existence. U. S. Office of Education, Nutrition Education Series, Pamphlet No. 3. Washington, D. C. Free.

Houses for Tomorrow. By T. R. Carskadon. A 32 page pamphlet based on a study made by the Twentieth Century Fund's Housing Committee, surveying the rôle of public housing, postwar building, jobs created thereby and changes needed in the industry and in selling and financing. New York City 20: Public Affairs Committee, Inc., 30 Rockefeller Plaza. 10 cents.

The Place of Reading in the Elementary School Program. By May Lazar. Educational Research Bulletin No. 7 of the Bureau of Reference, Research and Statistics of the New York City schools discussing the functioning of the reading program, classroom environment as an aid to reading growth, problems in method, and the school's responsibility in carrying out the program. New York City: Board of Education.

Seventh Annual Report of the Public Schools at Paragould, Ark. By Supt. Rufus D. Haynes. A 162 page mimeographed report on three elementary schools and one junior-senior high school with a total enrollment of 1406 pupils.

Commercial Supplementary Teaching Materials. A consumer education study of the National Association of Secondary-School Principals. A discussion of aids to teaching as furnished by business institutions. Washington 6, D. C.: National Education Association, 1201 Sixteenth Street, N.W. No charge for single copies.

Today's Children, Tomorrow's Hope. A pamphlet describing the deliberate campaign of destruction directed against children in the occupied countries by the Axis, based on facts obtained through the underground, in liberated territories and from the enemy. New York City: United Nations Information Office, 610 Fifth Avenue.

Our Nation's Children. A report on the welfare of children in war time by the Children's Bureau, U. S. Department of Labor, Washington 25, D. C.

Museum of Modern Art Catalog of Circulating Exhibitions. Parts II and IV cover exhibitions available for schools. Principals and superintendents interested can obtain information from Aloide Courter, Director, 11 West Fifty-Third Street, New York City 19.

FM for Education. By William D. Boutwell. A pamphlet containing suggestions for planning, licensing and utilizing educational FM stations owned and operated by school systems, colleges and universities. Washington, D. C.: U. S. Office of Education, Federal Security Agency.

A Measure for Audio-Visual Programs in Schools. By Helen Hardt Seaton. A study of the problems and difficulties of the audio-visual program with recommendations and a guide for the development of new programs. Washington 6, D. C.: American Council on Education, 744 Jackson Place. 40 cents.

A Guide to the Evaluation of Educational Experiences in the Armed Forces. Section I, now ready, gives information regarding the U. S. Armed Forces Institute, the Marine Corps Institute, the Coast Guard Institute and the Off-Duty program of the Navy; evaluations in terms of secondary school and college credit of correspondence courses offered by the first three, and summaries and recommendations of 166 service schools and courses in the different branches of the service. Urbana, Ill.: American Council on Education, 362 Administration Building. Cost of complete guide, \$2.

Rules and Regulations of the Cincinnati Board of Education. The title is self-explanatory. This is a 102 page volume describing school policies in that city. Cincinnati, Ohio: Board of Education.

A Suggestive Guide for Teaching Nutrition in Elementary Schools. Of value to those teaching nutrition as a part of the required program in health education. Chicago: Chicago Nutrition Committee. Free to teachers in Chicago and Cook County.

Health Unit in Nutrition. Based on the above-mentioned Guide and graded for primary and intermediate grades. Urbana, Ill.: Extension Service, University of Illinois. 10 cents.

The Story of Food Preservation. By Edith Elliott Swank. A handsomely bound and illustrated book prepared for the H. J. Heinz Company telling why foods spoil, how they have been stored and preserved from early times up to the present, and how quality foods are made. This is a limited edition.

From the Shadoof to the Dominant Drive. A thumbnail history of man's effort to transmit power for his own benefit, going back to prehistoric times: illustrated with sketches and photographs. Chicago 3: Multiple V-Belt Drive Association, 140 South Dearborn Street.

"I Would Place The Reader's Digest at the Head of the List

of required reading for teachers and
high school students." —John A. Shaw,

Superintendent of Schools, Spokane, Washington



*Lewis & Clark,
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in Spokane.*

"THIS STATEMENT," continues Mr. Shaw's letter, "is based upon my experience as a teacher of history in high school and as a junior high and senior high school principal who attempted to keep in touch with the educational procedures of his school.

"I approve of *The Reader's Digest* because of the breadth of its point of view, its objectivity, basic humanity, and brevity."

In 70,000 Classrooms

It is obvious that Mr. Shaw's opinion of *The Reader's Digest* is shared by many other prominent school people. Each month 850,000 copies of its Educational Edition go into 70,000 classrooms throughout the country.

The Educational Edition contains supplementary educational material and a special 16-page insert of reading and vocabulary exercises that provide a highly important and useful service which can be obtained from no other magazine.

105% Greater Improvement in Reading — 92% in Vocabulary

The value of this educational service to the schools of America was attested in a scientifically-supervised program conducted by Dr. Herbert A. Landry, member

of the Bureau of Reference, Research and Statistics of the Board of Education, New York City.

Under Dr. Landry's supervision 10,636 students were tested. One half of these students used *The Reader's Digest*. The other half did not. Those who *did* use it improved 105% in General Reading Ability and 92% in Vocabulary—*over and above* the improvement of those who followed ordinary study methods.

"Best for American Citizenship"

One question asked in a recent impartial Gallup Survey was: "Which one of these magazines, regularly distributed to high school students, do you think serves best in helping high school boys and girls to become better American citizens?"

TEN magazines were listed. *The Reader's Digest* easily won first preference—by a percentage so large that it exceeded the total vote for all three of the magazines that were next highest in the voting!

The Reader's Digest hopes that it soon will be possible to increase its service in helping to make better American citizens for the important years ahead. These plans must rest until paper again becomes available and permits acceptance of new orders.

7 OUT OF 10 PREFER IT

A nationwide survey recently was conducted by Dr. Gallup and his organization among thousands of teachers, P. T. A. officers, and parents.

Seven out of every ten (an average of 70.3% of persons in the three groups) selected *The Reader's Digest* as their preference, from a group of general magazines most widely used in high school classes in English.

The next magazine selected was chosen by 10% of those interviewed—a seven-to-one preference for *The Reader's Digest*.



EDUCATIONAL DEPARTMENT

The Reader's Digest

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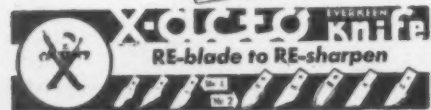
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KIT NO. 62—Double set with 2 handles, 12 blades. \$2.00



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Our Schools Fight for Liberty. Fifty-sixth annual report of John A. Sexson, superintendent of schools, Pasadena, Calif., depicting the impact of the war on schools of that city and their educational program. The first half of the book is pictorial; the second half contains financial statements, enrollment figures, attendance records, a balance sheet and graphs.

A Program for Public School Education in Ohio. A 90 page bulletin based on discussions and conclusions of 55 educators attending a summer workshop at Miami University and intended to encourage discussion of school problems by parents' and civic groups. Columbus, Ohio: Miami Workshop Committee, Room 100, Arps Hall. A nominal sum is charged.

Suggested Standards for Camp Nursing. A report in pamphlet form of the committee on camp nursing, a subcommittee of the school nursing section of the National Organization for Public Health Nursing, of value to those directly concerned with maintaining the best possible health programs in children's camps. New York City 19: National Organization for Public Health Nursing, 1790 Broadway. 25 cents.

Employment Training. A handbook for the use of teachers and counselors in guiding returning service people and displaced war workers into new jobs. San Diego: San Diego Vocational High School and Junior College.

NAMES IN NEWS

Superintendents

J. G. Burgeson, David City, Neb., has been elected superintendent of schools at Gordon, Neb.

George E. Holley, superintendent of the consolidated schools at Rothville, Mo., has been elected superintendent of schools at Pierce City, Mo.

Theodore L. R. Morgan, formerly superintendent of schools at East Rochester, N. Y., has become superintendent at Passaic, N. J.

K. P. Kimbrough, principal of New Site School, Alexander City, Ala., has been named superintendent of schools at Dawson, Ga. He will be succeeded by **Bernard L. Ross**.

Principals

Dr. Michael Levine, formerly principal of Public School No. 121, East Harlem, N. Y., was appointed principal of Prospect Junior High School No. 40, Bronx, N. Y.

Romeo Proulx, acting superintendent of the third supervisory district of Essex County, New York, has been appointed principal of Lake Placid Central School, Lake Placid, N. Y.

Herbert W. Schooling, formerly superintendent of schools at Hayti, Mo., has succeeded **O. K. Phillips** as principal of the high school at North Kansas, Mo.

Ivan Ginther, former principal of Bend Junior High School, Bend, Ore., has become principal of Captain Robert Gray School, Astoria, Ore. He succeeds **Dan Hall**.

Mrs. H. G. Etter has been appointed principal of Fairview Avenue School,

Waynesboro, Pa., replacing **Roy R. Cover** who has resigned.

John J. Medlin was elected principal of the high schools at Rome, Ga. Mr. Medlin has been acting superintendent of Rome County schools.

William K. Valentine has resigned as principal of Frederick Douglass Junior High School, Chester, Pa.

Dr. Irving L. Cohen has been appointed principal of Junior High School No. 128, Brooklyn, N. Y.

E. E. Purcell, formerly principal of the high school at Bogota, N. J., has been named supervising principal of schools at Bogota. He succeeds **Dr. G. W. Leman** who has become supervising principal at Oradell, N. J.

Fred C. King, former principal of Jacksonville Beach School, Jacksonville, Fla., has been appointed principal of A. L. Lewis Junior High School at Jacksonville. He succeeds **Dr. J. Irving E. Scott** who has been granted a leave of absence to become dean of Wiley College, Marshall, Tex.

Miscellaneous

Dr. Homer P. Rainey has been forced to resign as president of the University of Texas. Three members of the board have resigned in protest over his removal.

George A. Works, professor emeritus of the University of Chicago, has been appointed to succeed **Dr. Leonard Carmichael** as director of the National Roster of Scientific and Specialized Personnel, according to an announcement of the War Manpower Commission October 31. Doctor Carmichael will continue as chairman of the committee on scientific research personnel and as consultant to the Roster but he will devote a larger portion of his time to his duties as president of Tufts College.

Dr. Clarence A. Dykstra has resigned as president of the University of Wisconsin to become provost of the University of California at Los Angeles. He fills a vacancy caused by the death last year of **Dr. Earle R. Hedrick**.

Loran R. Snelson has resigned as principal of Gordon Lee High School, Chickamauga, Ga., to become associate professor of education at Kentucky Wesleyan College, Winchester, Ky.

Deaths

Guy F. Loomis, who retired last July after twenty-three years as superintendent of schools at Kenosha, Wis., died of a heart attack in Chicago recently. Doctor Loomis was treasurer of the Wisconsin State Teachers' Association for eighteen years.



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BOYS and girls look to their teachers for help and guidance in their school work . . . for encouragement of latent talents . . . for escape from routine into new and interesting fields of study.

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To arouse the curiosity of younger students there are Westinghouse "Historical Charts" that depict the evolution of ships, airplanes, tanks, and submarines, etc.

To unfold the wonderland of science, there are Westinghouse "Little Science Series" booklets—that make these subjects fascinating to high school students.

To keep up the interest in science, there are Westinghouse sound-movies especially prepared for

students on electricity, electronics, and radio broadcasting.

To pave the way for students to go on to college, there are Westinghouse Scholarships . . . including, among others, the George Westinghouse Scholarships and those awarded in the nation-wide Science Talent Search.

. . . .

This material and help are at the disposal of your teachers—ready to assist them in their inspiring work of preparing young Americans for the responsibilities which lie ahead of them.

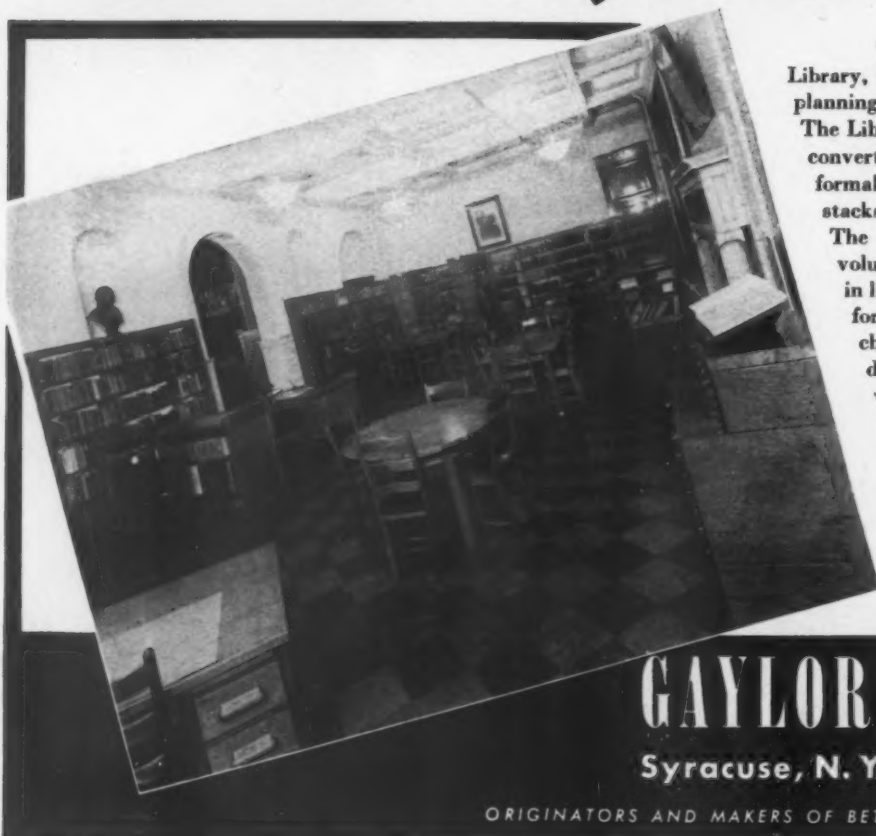
If you would like to see samples of this *free material* . . . if you would like to know more about Westinghouse Scholarships . . . please write to us. School Service, (NS-124) Westinghouse Electric & Manufacturing Company, Box 1017, Pittsburgh 30, Pa.

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The Reference Room of the Canton Public Library, Canton, Ohio, is an excellent example of planning for convenience now, and long service. The Librarian, in cooperation with Gaylord Bros., converted a reading room into an attractive, informal Reference Department. Wall shelving and stacks provide accessible space for 5800 volumes. The arrangement makes it as easy to replace volumes as to find them—an important item in library procedure. Comfortable study space for 30 readers is available at maple tables and chairs. The Department Head works at a desk near the entrance, readily accessible to visitors, while the assistant's desk is placed in a corner near vocational guidance material and college catalogs. Map cases, pamphlet and catalog files, dictionary holder, and a locked case for rare books make this an especially efficient room—an efficiency typical of all installations by:

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Wayne Rolling Gymstand



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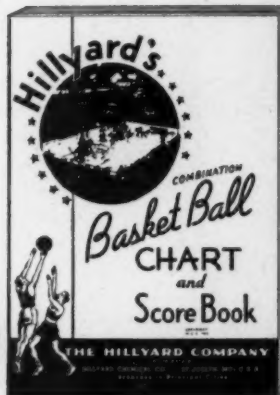


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What's New FOR SCHOOLS

New and Improved Dishwasher

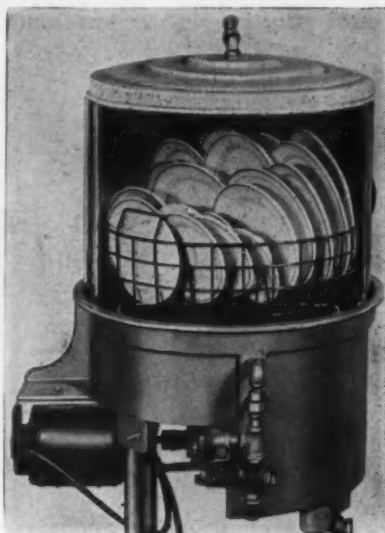
Washes All Dishes at One Time

Schools and other institutions with labor shortages in kitchens will be interested in the new dishwasher, Model 1-A, manufactured by the Jackson Dishwasher Company. The dishwasher's one-piece casting reservoir is divided into two sections and keeps the wash and rinse waters separate.

By means of a fine wire screen, refuse and food particles are kept from the pump, sprays or rinse chamber. As there is no contaminated water in the reservoir, all dishes, glassware and silverware can be washed at the same time.

Dishes may be put in the machine on one side of a table and removed on the other if desired. The machine is easily installed and simple to clean, as all parts are readily accessible.—Jackson Dishwasher Company, 3703 East Ninety-Third Street, Cleveland 5.

• When inquiring, refer to **NS1101**



Nonslip Plastic Floor Coating

Will Dry Overnight

Schools will find the new nonslip plastic floor coating, R-Mir-Dek, a valuable safety device in shower rooms, corridors, ramps, stairways and in buses. It may be put down over old wood, concrete or steel floors. The manufacturer claims it is absolutely fireproof and slipproof and has been used by the armed forces on gun platforms, floors of gliders and for step plates on planes carrying parachute troops.

Available in colors, it can be put down at the close of one day and walked on the following morning.—Miracle Adhesives Corporation, 261 Fabian Place, Newark 8, N. J.

• When inquiring, refer to **NS1102**

Ready-Mix Exterior Paint

Protects Masonry Surfaces

Mason-Bond is a ready-mixed exterior paint that resists dampness, permitting application in any kind of weather. Painting that has been started in sunshine may be finished in rain.

Designed to improve the methods of protecting masonry surfaces exposed to weather, Mason-Bond will resist lime

or alkali. It can be applied over damp or dry brick, stucco, cinder block, concrete or stone and adheres to smooth or rough surfaces. When the manufacturer's anti-fungus concentrate, Fungus-Ban, is added, a protective coating is developed to combat fungus growth.

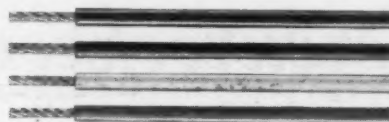
It is nonbrittle and may be applied by a brush or spray. The paint is supplied in white but can easily be tinted with limeproof oil colors.—The Wilbur and Williams Company, Park Square Building, Boston 16.

• When inquiring, refer to **NS1103**

Thermoplastic Lead Wire

Can Be Used in Lighting Fixtures

The appliance and merchandise department of General Electric is announcing a new thermoplastic lead wire called Deltabeston Flamenol. The wire can be used in all types of fluorescent lamp ballasts. It is mechanically strong and flexible and the manufacturer claims will not rupture when bent. Free stripping, it is easy to splice and terminate.



This new lead wire is approved by the Underwriters' Laboratories for use wherever 600 volt service is required and is approved for 176° F. The insulation is resistant to flame, oils, acids and alkalis. Deltabeston Flamenol is available in solid and stranded conductors, sizes 16 and 18 AWG in black, white, red and green.—General Electric Company, 1285 Boston Avenue, Bridgeport 2, Conn.

• When inquiring, refer to **NS1104**

Automatic Safety Gate

Guards Children Against Traffic

The robot safety guard of the Southern Switch and Signal Company can be synchronized with vehicular traffic controls at intersections where children must cross busy thoroughfares. It consists of an electro-mechanical safety gate combined with a standard street traffic light.

The entire assembly is mounted on a 6 inch tubular steel and cast-iron base. The traffic signal may carry any combination of lenses demanded by the traffic situation and can easily be synchronized with caution or amber light. All terminals of signal and gate are made up on one strip located just inside the rear door of the unit for ready accessibility. The arms are 6 to 20 feet in length.

Mechanical safety limits prevent raising of the arm when it should be down. Arm and weights are designed to prevent interference of operating by snow and ice. The Protect-O-Arm can be furnished with lights on the arm, warning bell or horn.—Southern Switch and Signal Company, Beach at Thatcher, P. O. Box 827, Shreveport, La.

• When inquiring, refer to **NS1105**

Effective Convenient Economical

THE effectiveness of Mercurochrome has been demonstrated by more than twenty years of extensive clinical use. For professional convenience Mercurochrome is supplied in four forms—Aqueous Solution in Applicator Bottles for the treatment of minor wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

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is economical because stock solutions may be dispensed quickly and at low cost. Stock solutions keep indefinitely.

Mercurochrome is antiseptic and relatively non-irritating and non-toxic in wounds.

Complete literature will be furnished on request.



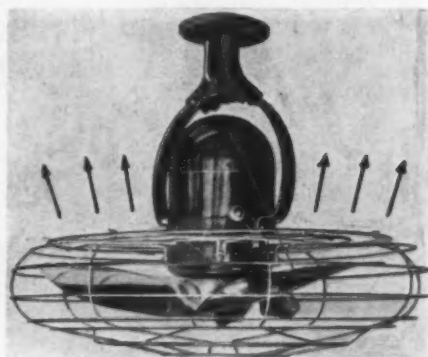
**HYNISON, WESTCOTT
& DUNNING, INC.**
BALTIMORE, MARYLAND

What's New FOR SCHOOLS

Heat Circulating Fan

Helps Save Fuel

To help schools combat the fuel shortage this winter, Reynolds Electric Company has manufactured a heat circulating fan that prevents heat from rising to the ceiling, thereby maintaining a uniform room temperature. The Reco heat circulating fan blows the air toward the ceiling, down the walls and up to the ceiling again, thus mixing it with all the air in the room. By supplying a constant flow of fresh air, it dissipates odors in crowded rooms and increases the



relative humidity. The Reynolds Company states that large classrooms that usually require three or four hours to heat comfortably can be heated in a few minutes if the Reco fan is in operation. The constant movement of the air prevents windows from becoming foggy or frosty. Reco fans are supplied with 24 inch diameter propellers and can be obtained without priority by procuring approval on form WPB-541.—Reynolds Electric Company, 2609 West Congress Street, Chicago 12.

• When inquiring, refer to NS1106

NEW CATALOGS

Series of Bulletins

Explains Johnson Duo-Stat

Economical and efficient temperature control with Johnson electronic Duo-Stat is explained in a series of bulletins published by the Johnson Service Company, Milwaukee 2. Operating principles of the heat regulator are presented by diagrams and pictures. Installation details for various types of hook-ups are shown in the technical data bulletin. Bulletins explain Duo-Stat devices for fuel saving, universal applications to heating systems and the right amount of heat to offset changing outside conditions. Also illustrated are factors to consider in zoning and weather compensated control of automatic firing.

• When inquiring, refer to NS1107

Color Dynamics Bulletin

Suggests Proper Schemes for Schools

An illustrated booklet called "Color Dynamics" issued by Pittsburgh Plate Glass Company, Grant Building, Pittsburgh 19, contends that use of the energy in color can promote efficiency in schools. Samples are given of preferred colors for the ceilings, walls and trim of classrooms, locker and shower rooms, libraries and study hall, toilets and laboratories.

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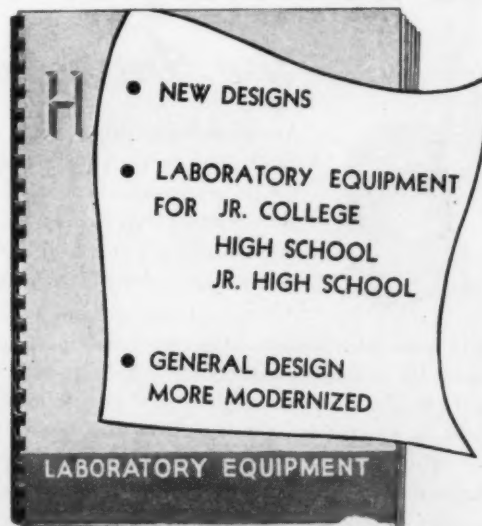
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What's New FOR SCHOOLS

The bulletin explains the importance of the proper atmosphere in schools, which depends, in part, upon proper lighting and the consequent safeguarding of vision, plus the use of appropriate color schemes. For example, in art rooms the background should be in neutral colors with two or more values of gray or beige in a flat finish to avoid monotony. Color accents may be used by painting the interiors of storage cabinets in contrasting colors.

Administrators will find this book a valuable guide to the rules governing the use of warm and cool colors, the placement of colors and the selections of colors in keeping with the use of the room.

• When inquiring, refer to **NS1108**

Ampro News Bulletin

Tells of Postwar Facilities

Manufacturer of 16 mm. and 8 mm. motion picture projectors, **Ampro Corporation**, 2851 North Western Avenue, Chicago, has just issued "Ampro News," a bulletin explaining its recent joining with General Precision Equipment Corporation, New York City, distributors of 35 mm. equipment.

After the war, increased research facilities will enable the corporation to offer 8 mm. and 16 mm. cameras and projectors, 16 mm. auditorium sound projectors, 16 mm. silent and sound projectors for education, a complete line of accessories and reels and automatic projectors, some of which are pictured in the bulletin.

Schools are told of the advantages they will receive by the findings of the use of motion pictures in instructing the armed forces.

• When inquiring, refer to **NS1109**

New Film Catalog

Describes Britain at War

The Film Division of the British Information Services, 30 Rockefeller Plaza, New York City 20, has issued a 1944-45 catalog of 16 mm. sound films called "Britain at War." One or two films which are historical records of the early phases of the war have been retained, but the catalog is an over-all picture of Britain's final struggles in the war and her plans for peace. Films are given of Britain at war, the R. A. F., naval services, British Commonwealth of Nations, industrial and home fronts, youth and education and the farm front.

• When inquiring, refer to **NS1110**

March of Time

Announces New Film Series

An increasing demand from educational groups has prompted the **March of Time**, 369 Lexington Avenue, New York City 17, to edit eight of its 13 annual films for use in schools and colleges. These special 16 mm. adaptations will be known as the Forum Edition and will run from twelve to fifteen minutes.

To make up the Forum Edition, the editors of the **March of Time**, in collaboration with the editors of *Time*, *Life* and *Fortune*, will choose eight films yearly which offer



THE NEW KEYSTONE OVERHEAD PROJECTOR

With this new projector, the instructor, the projector and the screen are brought together at the front of the classroom. The instructor remains facing his class in a normal teaching situation. As he points with his pencil to features of the slide under discussion, the shadow of the pencil is reproduced on the screen. Original drawings, sketches or written messages can be projected by using special etched glass slides. Write for complete data.



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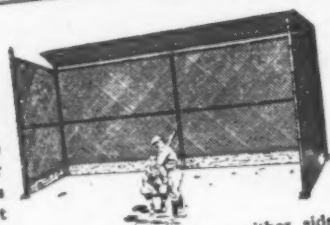
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Stewart Tennis Court and Baseball Backstops are now available, without a priority, to those participating in the U. S. Office of Education Victory Corps Program. Other products available, but subject to favorable action on an appeal to WPB, are Chain Link Wire Fence, Window Guards, Folding Gates and Wire Partitions. Write for Catalogue No. 79. Please mention specifically products in which you are interested.

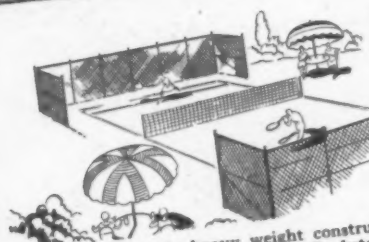
BASEBALL BACKSTOPS

Standard Backstop as available under U. S. Victory Corps Program is 20 feet wide and 12 feet high with 10 foot wing set at an angle on either side. Above the 20 foot center section is a 4 foot overhang to deflect rebounding balls.

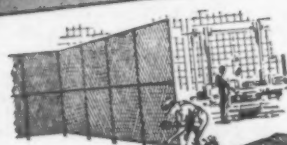


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What's New FOR SCHOOLS

the most outstanding educational material. For each film they will write a new commentary to point out the social and economic significance of the subject, cut out "spot" news and add maps and charts.

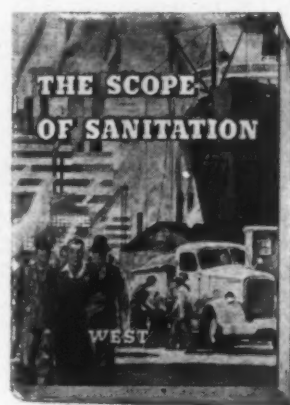
The films can be rented at a series price or individually. The subjects selected for 1944-45 are: Brazil, Portugal, Texas, Canada, India, Airways of the Future, New England and South Africa. A discussion outline will be sent in advance to subscribers.

• When inquiring, refer to NS1111

Methods of Sanitation Control

Are Shown in West Catalog

The 68 page illustrated catalog, "The Scope of Sanitation," issued by the West Disinfecting Company, Long Island City 1, N. Y., contains detailed information on proper washroom and building sanitation. Complete descriptions of West cleansing disinfectants, bowl cleaners, deodorizers, liquid soaps and soap dispensers, paper towels, floor maintenance products, special purpose cleaners and preservatives are given. Written from the standpoint of health protection and building appearance, the catalog shows the importance of selecting maintenance products that are both effective and economical in the preservation of equipment, floors and fixtures.



• When inquiring, refer to NS1112

FILM RELEASES

Partners in Production—16 mm. sound. 28 minutes. Made in Britain by the National Film Board of Canada. Outlines the story of labor management and joint production committees in war-time Britain. A typical election in a factory is shown. The film reviews some of the different kinds of committees in existence and the methods they use to ensure that workers and management become partners in production.—Brandon Films, Inc., 1600 Broadway, New York 19.

• When inquiring, refer to NS1113

Problems in Supervision Series—16 mm. 8 to 16 minutes. U. S. Office of Education has issued 16 films for vocational schools and to train foremen and supervisors in war industries. **Instructing the Worker on the Job**, one of the 16 films, takes up the problem of supervision, raises questions commonly faced by supervision and suggests practical ways of meeting them. **Maintaining Good Working Conditions**

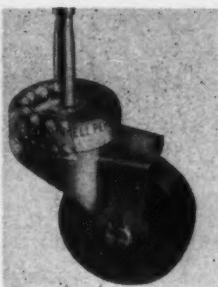
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What's New FOR SCHOOLS

provokes thought and discussion to personnel directors and shop foremen.—Castle Films, 30 Rockefeller Plaza, New York City 20.

• When inquiring, refer to **NS1114**

What Makes Us Grow—16 mm. sound. 11 minutes. National Film Board of Canada film explains the necessity of proper food to a youthful audience. By showing results of experiments with rats in vitamin deficiencies, the film advises children to eat more eggs, fresh vegetables and fruit. Body building and protecting foods of the child's ration are given.—Pictorial Films, Inc., 1270 Sixth Avenue, New York City.

• When inquiring, refer to **NS1115**

Liberty—16 mm. sound. One reel. Portrays the hopes of the immigrant coming to America, his aspirations and his contributions to our culture. The film documents the contrast between foreign "isms" and democracy and emphasizes the need for a better understanding of the peoples of our nation.—Walter O. Gutlohn, Inc., 25 West Forty-Fifth Street, New York City 19.

• When inquiring, refer to **NS1116**

Lesson From the Air—16 mm. sound. 14 minutes. Shows the planning and execution of the educational programs which are radioed every day to schools all over Britain by the British Broadcasting Corporation.—Film Division, British Information Services, 30 Rockefeller Plaza, New York City 20.

• When inquiring, refer to **NS1117**

PLANNED FOR THE FUTURE

Postwar Steel Windows

Announced in Fenestra Catalog

The new catalog demonstrates the types and sizes of Fenestra steel windows that have been adopted by the Detroit Steel Products Company, 2250 East Grand Boulevard, Detroit 11, and subscribed to by the Metal Window Institute. The information has been prepared in advance of the Fenestra bluebook catalog for 1945 for Sweet's Architectural File.

This detailed book illustrates the progress of the Metal Window Institute in its program to coordinate the dimensions of metal windows with the dimensions of collateral building materials. When metal window manufacture is resumed, solid sash and double hung steel windows will be coordinated with modular sizes for masonry.

Intermediate, pivoted, commercial and architectural projected and security windows are drawn in detail and show prepared openings in masonry, glazed brick and tile backing walls for the windows. Window combinations and bay layouts give the width of the opening and the types and arrangements of windows.

• When inquiring, refer to **NS1118**

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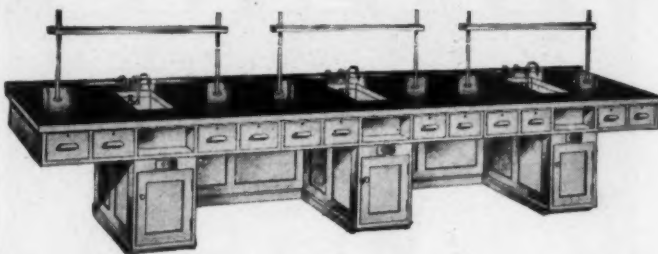
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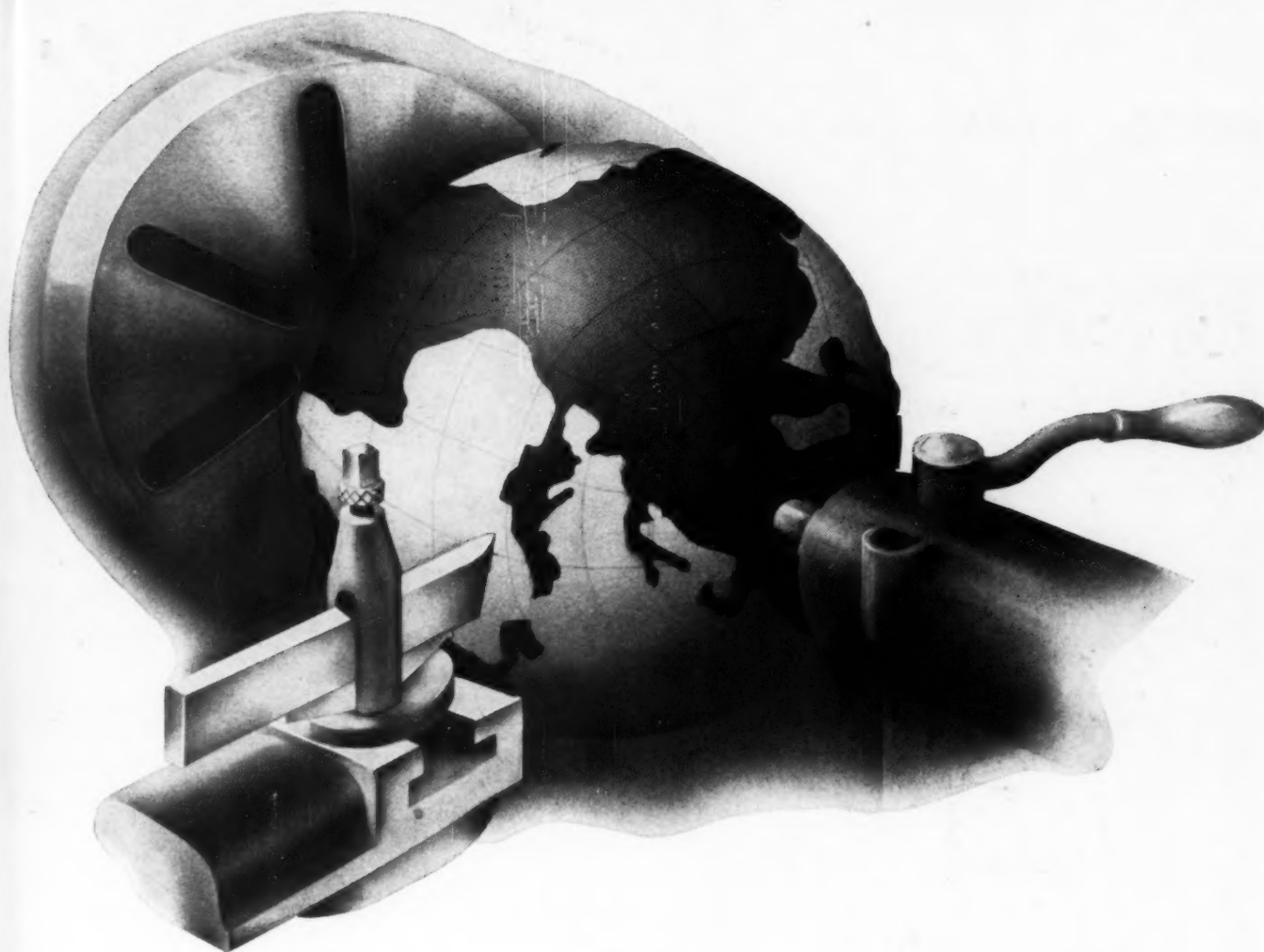


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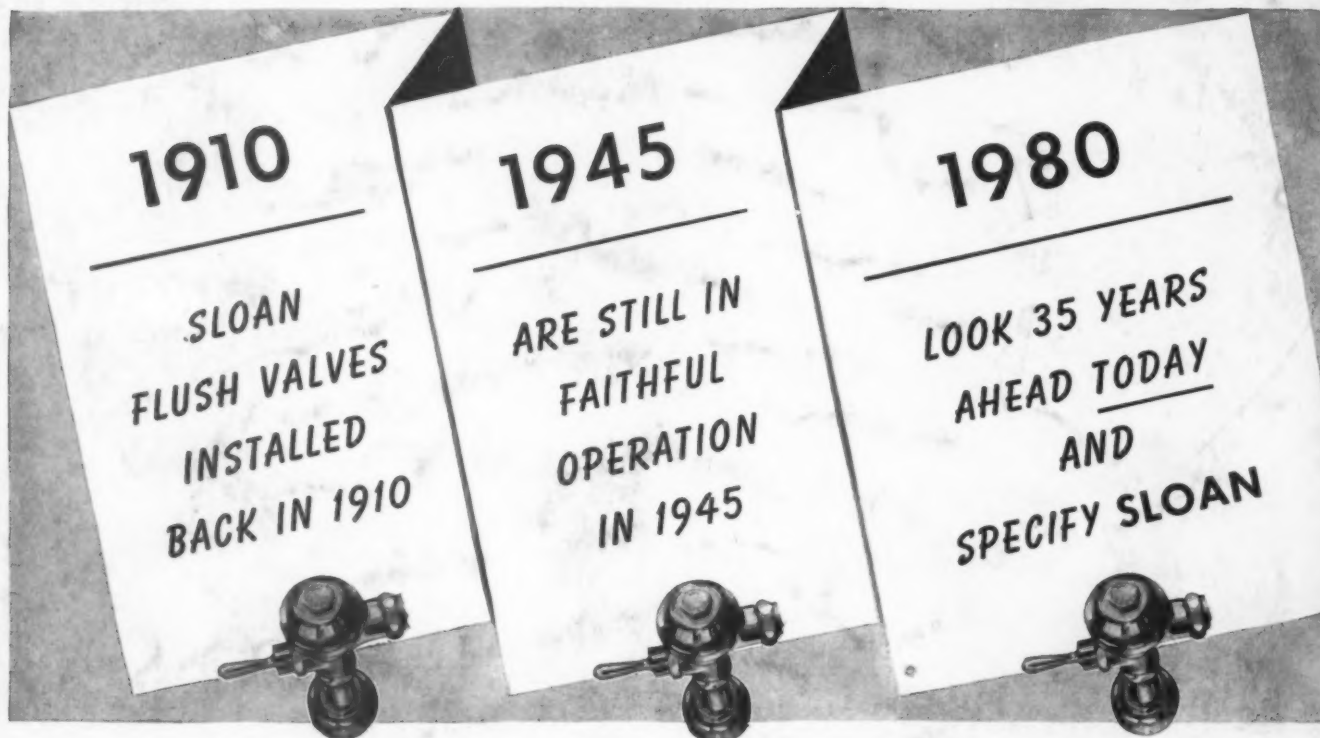
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